

**Commonwealth of Massachusetts
Department of Telecommunications and Energy
Fitchburg Gas and Electric Light Company
Docket No. D.T.E. 02-24/25
Record Request Response**

Record Request No. DTE-RR-14 (Gas)

Provide the numbers and rate classes when June or September was used (and specify which month was used) in the weather normalization calculations instead of July.

Response:

The following summarizes the base use calculations other than July for each rate class.

Base Use August and September

R-1	Sales
R-2	Sales
R-3	Sales
R-4	Sales
G-42	Sales
G-43	Sales
G-41	Transportation

Base Use June and August

G-42	Transportation
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However, in reviewing this analysis, Mr. Harrison identified a systematic spreadsheet error that resulted in a small distortion to the proper presentation of base use. Mr. Harrison proposed a change from Department precedent: to compute base use on the average of August and July when July usage was representative of base use. When July usage was less than 75% of August usage Mr. Harrison recommended the averaging of August and the lower of June or September. Unfortunately, the spreadsheet logic did not comply with this rule curve.

The attachment presents the corrected weather normalization calculation as recommended by Mr. Harrison. In order to evaluate the impact of this change, comparisons have been provided with the originally filed, incorrect, figures and with the results obtained using the Department's conventional method of defining base use as the average of July and August, as previously provided in response to DTE-1-45.

The first 20 pages of the attachment detail the weather normalization for each class and correct the Workpapers Supporting Schedule JLH-2 & 3 (Gas), pages 21 to 40. Page 21 corresponding to page 41 of the originally filed workpapers, summarizes the billing month weather normalization calculations. Pages 22 and 23 show the differences between the corrected and originally fixed calculations in therms and percentages, respectively. A review of this data reveals that the difference in total is less than 0.04% and that for individual rate classes, most differences are less than one percent.

The comparison between Mr. Harrison's proposed method and the Department's current precedent are shown on pages 24 to 46. Pages 24 to 43 show individual class

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calculations. Page 44 shows the billing month weather normalized sales using the current precedent, as previously provided in response to DTE-1-45. Pages 45 and 46 show the differences between the Mr. Harrison's corrected figures and those from DTE-1-45 in terms and percentages, respectively.

Using the corrected methodology, the following table indicates the classes whose calculation of base use employs months other than July.

Base Use August and September

R-4	Sales
G-42	Sales
G-43	Sales
G-41	Transportation
G-43	Transportation

Base Use June and August

G-52	Transportation
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If Mr. Harrison's proposal is accepted by the Department, the Company's compliance filing, including its rate design calculations, will be revised to include the corrected billing determinants.

Person Responsible: James L. Harrison

**Fitchburg Gas and Electric Light Company
Sales and Demand Model
Normalization Calculations**

Class Number = 1

R-1 Resi Non-Heat Sales

Line No.	Month	Billing Cycle Customers	Billing Cycle Sales	Base Load per customer	Heating Load	Monthly Actual Degree Days	Monthly Normal Degree Days	Colder Than Normal	Warmer Than Normal	Actual Unit Heat Load Therms/DD	Weather Adjustment	Normal Heat Load	Normal Billing Cycle Therms	Average Use Per Customer	Weather Adj Billing Block Rate	Base Rate Revenue	Weather Adjustment
1	November	2,896	55,144	34,056	21,089	479	550	(71)	(190)	44.06	3,125	24,213	56,269	19	0.22450	\$701	
2	December	2,898	59,317	34,079	25,237	656	847	(190)	(190)	38.44	7,312	32,550	66,629	20	0.22450	\$1,642	
3	January	2,940	89,799	34,573	55,226	1,357	1,222	135	135	40.70	(5,500)	49,725	84,289	31	0.22450	(\$1,235)	
4	February	2,932	73,996	34,479	39,517	1,163	1,202	(39)	(39)	33.97	1,331	40,847	75,326	26	0.22450	\$299	
5	March	2,935	90,385	34,514	55,871	1,079	990	89	89	51.79	(4,605)	51,266	85,780	31	0.22450	(\$1,034)	
6	April	2,896	53,677	34,056	19,621	878	782	96	96	22.35	(2,143)	17,478	51,534	19	0.22450	(\$481)	
7	May	2,907	56,599	34,185	22,414	878	834	(88)	(88)	64.70	5,687	28,101	62,286	19	0.22450	\$1,277	
8	June	2,897	54,566	34,068	20,499	233	193	40	40	88.08	(3,506)	16,993	51,061	19	0.22450	(\$787)	
9	July	2,887	40,755	33,950	6,805	31	35	(4)	(4)	217.69	842	7,647	41,597	14	0.22450	\$189	
10	August	2,906	27,369	34,173	-	13	11	2	2	0.00	0	0	27,369	9	0.22450	\$0	
11	September	2,882	41,702	33,891	7,811	31	66	(35)	(35)	252.29	8,833	16,643	50,535	14	0.22450	\$1,983	
12	October	2,872	37,261	33,774	3,487	215	261	(46)	(46)	16.20	747	4,234	38,008	13	0.22450	\$168	
13	Total	2,904	680,571	409,799	277,576	6,481	6,593	(112)	(112)	12,122	12,122	289,698	692,692	234		\$	2,721
14	Winter	2,916	422,319	205,768	216,561	5,612	5,592	20	20	481	-481	216,079	421,837	145		\$	(108)
15	Summer	2,892	258,252	204,041	61,016	870	1,001	(132)	(132)	12,603	12,603	73,619	270,865	89		\$	2,829

Average Base Used Jul & Aug

11.76

**Fitchburg Gas and Electric Light Company
Sales and Demand Model
Normalization Calculations**

Class Number = 2

R-2 Resi NH Low Inc Sales

Line No.	Month	Billing Cycle Customers	Billing Cycle Sales	Base Load per customer	Heating Load	Monthly Degree Days		Colder Than Normal	Actual Unit Heat Load Therms/DD	Weather Adjustment	Normal Heat Load	Normal Billing Cycle Therms	Normal Firm Billing Cycle Therms	Average Use Per Customer	Weather Adj. Billing Block Rate	Base Rate Revenue	Weather Adjustment	
						Actual Degree Days	Normal Degree Days											
1	November	173	3,557	2,578	979	474	545	(71)	2.07	147	1,126	3,704	21	\$	0.13470	\$20		
2	December	176	4,705	2,623	2,082	661	851	(190)	3.15	600	2,683	5,306	27	\$	0.13470	\$81		
3	January	193	5,851	2,876	2,974	1,351	1,217	135	2.20	(297)	2,678	5,554	30	\$	0.13470	(\$40)		
4	February	199	5,304	2,866	2,389	1,169	(40)	81	2.00	81	2,419	5,385	27	\$	0.13470	\$11		
5	March	199	5,323	2,866	2,388	1,079	988	(198)	2.19	(198)	2,169	5,125	27	\$	0.13470	(\$27)		
6	April	203	5,462	3,025	2,437	879	783	96	2.77	(266)	2,171	5,196	27	\$	0.13470	(\$36)		
7	May	193	4,854	2,876	1,978	345	435	(90)	5.73	513	2,490	5,367	25	\$	0.13470	\$69		
8	June	204	3,980	3,040	939	235	194	40	4.00	(161)	778	3,818	20	\$	0.13470	(\$22)		
9	July	198	3,587	2,951	636	31	35	(4)	20.32	75	712	3,663	18	\$	0.13470	\$10		
10	August	197	2,299	2,936	-	13	11	2	0.00	0	0	2,299	12	\$	0.13470	\$0		
11	September	195	2,749	2,906	-	31	65	(34)	0.00	0	0	2,749	14	\$	0.13470	\$0		
12	October	191	2,935	2,847	89	214	260	(46)	0.42	19	108	2,955	15	\$	0.13470	\$3		
13																		
14	Total	193	50,609	34,591	16,811	6,482	6,593	(112)		512	17,323	51,121	262	\$		\$	69	
15	Winter	191	30,204	17,035	13,169	5,612	5,992	(20)		66	13,235	30,269	158	\$		\$	9	
16	Summer	196	20,405	17,556	3,642	869	1,001	(132)		446	4,088	20,851	104	\$		\$	60	

Average Base Used Jul & Aug

14.90

75

75

**Fitchburg Gas and Electric Light Company
Sales and Demand Model
Normalization Calculations**

Class Number = 3

R-3 Resi Heating Sales

Line No.	Month	Billing Cycle Customers	Billing Cycle Sales	Base Load per customer	Heating Load	Monthly Actual Degree Days	Monthly Normal Degree Days	Colder (Warmer) Than Normal	Actual Unit Heat Load Therms/DD	Weather Adjustment	Normal Heat Load	Normal Firm Billing Cycle Therms	Average Use Per Customer	Weather Adj Billing Block Rate	Base Rate Revenue	Weather Adjustment	
1	November	9,005	645,165	195,118	449,046	484	555	(71)	926.91	65,745	514,791	710,910	72	\$ 0.25100	\$16,502		
2	December	9,047	889,233	197,033	692,199	662	852	(190)	1,045.53	198,572	890,771	1,087,805	98	\$ 0.25100	\$49,842		
3	January	9,377	1,920,737	204,220	1,716,517	1,360	1,226	133	1,262.55	(168,382)	1,548,135	1,752,355	205	\$ 0.25100	(\$42,264)		
4	February	9,278	1,672,382	202,064	1,470,318	1,159	1,194	(36)	1,268.86	45,315	1,515,633	1,717,697	180	\$ 0.25100	\$11,374		
5	March	9,565	1,519,468	203,959	1,315,510	1,076	989	86	1,223.10	(105,370)	1,210,140	1,414,099	162	\$ 0.25100	(\$26,448)		
6	April	9,098	1,124,898	195,144	929,754	870	776	95	1,064.67	(100,857)	825,897	1,024,041	124	\$ 0.25100	(\$25,315)		
7	May	8,976	511,775	195,487	316,288	343	427	(84)	921.53	77,396	393,684	589,171	57	\$ 0.25100	\$19,426		
8	June	8,789	323,233	191,414	131,819	227	189	38	580.17	(22,134)	109,686	301,100	37	\$ 0.25100	(\$5,556)		
9	July	8,823	203,612	192,155	11,457	31	35	(4)	373.51	1,468	12,925	205,080	23	\$ 0.25100	\$369		
10	August	8,848	181,242	192,699	7,745	13	12	1	0.00	0	0	181,242	20	\$ 0.25100	\$0		
11	September	8,858	200,562	192,917	7,745	33	66	(35)	233.13	8,204	15,949	208,866	23	\$ 0.25100	\$2,059		
12	October	8,898	302,771	193,788	108,983	221	269	(47)	492.27	23,260	132,243	326,031	34	\$ 0.25100	\$5,838		
13																	
14	Total	9,030	9,495,179	2,359,998	7,146,638	6,479	6,593	(114)		23,217	7,169,855	9,518,396	1,035		\$ 5,827		
15	Winter	9,195	7,771,884	1,201,538	6,570,346	5,611	5,593	18		-64,978	6,505,368	7,706,906	841		\$ (16,309)		
16	Summer	8,665	1,723,295	1,158,460	576,292	869	1,000	(131)		88,195	664,487	1,811,490	194		\$ 22,137		

Average Base Used Jul & Aug 21.78

Fitchburg Gas and Electric Light Company
Sales and Demand Model
Normalization Calculations

Class Number = 4

R-4 Resi Htg Low Inc Sales

Line No.	Month	Billing Cycle Customers	Billing Cycle Sales	Base Load per customer 28.15	Heating Load	Monthly Actual Degree Days	Monthly Normal Degree Days	Colder (Warmer) Than Normal	Actual Unit Heat Load Thems/DD	Weather Adjustment	Normal Heat Load	Normal Firm Billing Cycle Thems	Average Use Per Customer	Weather Adj Billing Block Rate	Base Rate Revenue Weath Adjustment
1	November	1,100	72,621	27,663	44,958	479	551	(72)	93.87	6,727	51,685	79,348	66	\$ 0.15060	\$1,013
2	December	1,103	97,912	27,889	70,023	662	856	(193)	105.74	20,449	90,472	118,361	88	\$ 0.15060	\$3,080
3	January	874	148,563	21,979	126,584	1,361	1,230	131	93.02	(12,218)	114,366	136,345	170	\$ 0.15060	(\$1,840)
4	February	896	138,649	22,533	116,116	1,163	1,203	(40)	89.86	3,977	120,093	142,626	155	\$ 0.15060	\$599
5	March	917	132,460	23,061	109,419	1,077	986	(91)	101.64	(9,195)	100,224	123,265	144	\$ 0.15060	(\$1,385)
6	April	1,085	127,634	27,286	100,348	870	774	96	115.36	(11,112)	89,236	116,522	118	\$ 0.15060	(\$1,1673)
7	May	1,172	64,131	29,474	34,657	334	424	(91)	103.91	9,413	44,070	73,544	55	\$ 0.15060	\$1,418
8	June	1,284	46,209	32,290	13,919	228	188	40	60.96	(2,464)	11,455	43,745	36	\$ 0.15060	(\$371)
9	July	1,277	28,982	32,114	-	31	33	(2)	0.00	0	0	28,982	23	\$ 0.15060	\$0
10	August	1,248	25,371	31,385	-	12	12	1	0.00	0	0	25,371	20	\$ 0.15060	\$0
11	September	1,218	36,644	30,630	6,014	34	68	(34)	175.00	5,945	11,959	42,590	30	\$ 0.15060	\$695
12	October	1,207	29,204	30,354	-	222	270	(48)	0.00	0	0	29,204	24	\$ 0.15060	\$0
13	Total	1,116	948,401	336,657	622,040	6,473	6,593	(121)	633.561	11,521	633,561	969,923	929	\$	\$ 1,735
14	Winter	997	717,860	150,411	567,449	5,611	5,598	13	566.077	-1,372	566,077	716,487	741	\$	(\$207)
15	Summer	1,234	230,542	186,247	54,591	861	995	(134)	67.485	12,894	67,485	243,436	188	\$	\$ 1,942

Average Base Used Aug & Sep 25.15

**Fitchburg Gas and Electric Light Company
Sales and Demand Model
Normalization Calculations**

Class Number = 5

G-41 GS Small Hi Wtr Sales

Line No.	Month	Billing Cycle Customers	Billing Cycle Sales	Base Load per customer 22.53	Heating Load	Monthly Actual Degree Days	Monthly Normal Degree Days	Colder (Warmer) Than Normal	Actual Unit Heat Load Therms/DD	Weather Adjustment	Normal Heat Load	Normal Firm Billing Cycle Therms	Average Use Per Customer	Weath Adj Billing Block Rate	Base Rate Revenue Weath Adjustment
1	November	861	126,288	19,400	106,888	515	590	(75)	207.45	15,563	122,441	141,842	147	\$ 0.21360	\$3,322
2	December	874	168,244	19,693	148,551	690	880	(189)	215.22	40,739	189,290	208,983	192	\$ 0.21360	\$8,702
3	January	881	513,345	19,851	493,494	1,372	1,256	116	359.73	(41,555)	451,939	471,790	583	\$ 0.21360	(\$8,876)
4	February	885	407,181	19,941	387,240	1,138	1,166	(28)	340.19	9,486	396,695	416,636	460	\$ 0.21360	\$2,020
5	March	882	363,403	19,874	343,529	1,067	974	93	322.07	(29,966)	313,573	333,447	412	\$ 0.21360	(\$6,399)
6	April	890	252,773	20,054	232,719	824	741	83	282.26	(23,536)	209,183	229,237	284	\$ 0.21360	(\$5,027)
7	May	872	75,430	19,648	55,782	314	392	(78)	177.68	13,873	69,654	89,302	87	\$ 0.21360	\$2,963
8	June	852	32,046	19,198	12,849	196	164	32	65.53	(2,108)	10,740	29,938	38	\$ 0.21360	(\$450)
9	July	862	17,731	19,423	-	31	29	2	0.00	572	2,263	17,731	21	\$ 0.21360	\$0
10	August	854	20,934	19,243	1,692	10	14	(4)	161.51	0	2,263	21,506	25	\$ 0.21360	\$122
11	September	822	10,772	18,522	-	43	81	(37)	0.00	3,831	23,989	10,772	13	\$ 0.21360	\$0
12	October	858	39,490	19,333	20,158	258	307	(49)	78.16	0	23,989	43,322	46	\$ 0.21360	\$818
13															
14	Total	866	2,027,639	234,178	1,802,901	6,460	6,593	(134)		(13,133)	1,789,768	2,014,506	2,306		\$ (2,805)
15	Winter	879	1,831,235	118,813	1,712,422	5,607	5,607	(0)		-29,300	1,683,122	1,801,935	2,078		\$ (6,259)
16	Summer	853	196,404	115,365	90,479	853	986	(133)		16,167	106,646	212,571	228		\$ 3,453

Average Base Used Jul & Aug 22.53

**Fitchburg Gas and Electric Light Company
Sales and Demand Model
Normalization Calculations**

Class Number = 6

G-42 GS Med HI Wtr Sales

Line No.	Month	Billing Cycle		Base Load per customer	Heating Load	Monthly Degree Days		Colder (Warmer) Than Normal	Actual Unit Heat Load		Weather Adjustment	Normal Heat Load	Normal Firm Billing Cycle Therms		Average Use Per Customer	Weather Adj. Billing Block Rate		Base Rate Revenue Weath Adjustment
		Customers	Sales			Actual Degree Days	Normal Degree Days		Heat Load	Therms/DD			Normal Billing Cycle Therms	Normal Billing Cycle Therms		Billing Block	Rate	
1	November	140	229,288	38,620	190,668	520	611	(91)	366.34	33,190	33,190	223,858	262,478	1,638	\$	0.20250	\$6,721	
2	December	170	312,449	46,896	265,553	675	892	(217)	393.68	85,422	85,422	350,975	397,871	1,838	\$	0.20250	\$17,298	
3	January	155	738,423	42,758	695,664	1,368	1,253	115	508.51	(58,698)	(58,698)	636,967	679,725	4,764	\$	0.20250	(\$11,866)	
4	February	145	594,507	40,000	554,507	1,135	1,150	(14)	488.38	6,962	6,962	561,469	601,469	4,100	\$	0.20250	\$1,410	
5	March	148	534,051	40,827	493,224	1,072	973	99	459.92	(45,509)	(45,509)	447,714	488,542	3,608	\$	0.20250	(\$9,216)	
6	April	146	332,898	40,275	292,622	827	731	97	353.64	(34,246)	(34,246)	258,376	298,651	2,280	\$	0.20250	(\$6,935)	
7	May	150	168,224	41,379	126,845	303	385	(82)	418.43	34,213	34,213	161,059	202,437	1,121	\$	0.20250	\$6,928	
8	June	146	78,563	40,275	38,388	200	155	45	191.73	(8,694)	(8,694)	29,694	69,969	539	\$	0.20250	(\$1,761)	
9	July	144	46,722	39,724	6,998	32	28	4	221.66	0	0	6,168	45,832	324	\$	0.20250	(\$1,168)	
10	August	146	32,202	40,275	-	10	15	(5)	0.00	0	0	0	32,202	221	\$	0.20250	\$0	
11	September	142	47,246	39,172	8,074	44	55	(11)	182.63	7,515	7,515	15,569	54,761	333	\$	0.20250	\$1,522	
12	October	142	102,688	39,172	63,516	252	316	(64)	251.81	16,171	16,171	79,667	118,859	723	\$	0.20250	\$3,275	
13	Total	148	3,217,359	489,374	2,736,059	6,440	6,593	(154)		35,497	35,497	2,771,555	3,252,856	21,490	\$		7,188	
14	Winter	151	2,741,615	249,377	2,492,238	5,598	5,609	(11)		-12,880	-12,880	2,479,359	2,728,735	18,228	\$		(2,608)	
15	Summer	145	475,744	239,997	243,821	841	984	(143)		48,376	48,376	292,197	524,120	3,261	\$		9,796	

Average Base Used Aug & Sep 275.86

**Fitchburg Gas and Electric Light Company
Sales and Demand Model
Normalization Calculations**

Class Number = 7

G-43 GS Large Hi Wtr Sales

Line No.	Month	Billing Cycle Customers	Billing Cycle Sales	Base Load per customer 1,538.76	Heating Load	Monthly		Colder (Warmer) Thats Normal	Actual Unit HeatLoad Thems/DD	Weather Adjustment	Normal Heat Load	Normal Billing Cycle Thems	Average Use Per Customer	Weather Adj Billing Block Rate	Base Rate Revenue Weath Adjustment
						Actual Degree Days	Normal Degree Days								
1	November	6	88,459	9,233	79,226	515	775	(260)	153.93	40,043	119,269	128,502	14,743	\$ 0.09790	\$3,920
2	December	8	125,521	12,310	113,210	687	981	(293)	164.70	48,317	161,528	173,838	15,690	\$ 0.09790	\$4,730
3	January	11	313,947	16,926	297,021	1,363	1,256	107	217.85	(23,349)	273,672	290,598	28,541	\$ 0.09790	(\$2,286)
4	February	9	179,501	13,849	165,652	1,144	1,055	89	144.79	(12,831)	152,821	166,670	19,945	\$ 0.09790	(\$1,256)
5	March	8	172,784	12,310	160,474	1,068	953	114	150.27	(17,195)	143,279	155,589	21,598	\$ 0.09790	(\$1,653)
6	April	8	90,722	12,310	78,411	822	611	211	95.37	(20,139)	58,273	70,563	11,340	\$ 0.09790	(\$1,972)
7	May	5	35,045	7,694	27,351	312	315	(4)	87.80	347	27,698	35,392	7,009	\$ 0.09790	\$34
8	June	8	19,068	12,310	6,758	200	82	119	33.73	(3,999)	2,759	15,069	2,384	\$ 0.09790	(\$391)
9	July	8	11,735	12,310	-	31	15	16	0.00	0	0	11,735	1,467	\$ 0.09790	\$0
10	August	7	10,228	10,771	-	10	22	(12)	0.00	0	0	10,228	1,461	\$ 0.09790	\$0
11	September	9	14,392	13,849	543	41	125	(83)	13.10	1,093	1,636	15,485	1,599	\$ 0.09790	\$107
12	October	8	51,199	12,310	38,889	254	403	(148)	152.97	22,689	61,578	73,888	6,400	\$ 0.09790	\$2,221
13															
14	Total	8	1,112,600	146,182	967,536	6,448	6,593	(145)		34,977	1,002,513	1,147,577	132,176	\$	\$ 3,424
15	Winter	8	970,933	76,938	893,995	5,600	5,632	(32)		14,846	908,841	985,779	111,857	\$	\$ 1,453
16	Summer	8	141,667	69,244	73,541	849	961	(113)		20,131	93,672	161,798	20,320	\$	\$ 1,971

Average Base Used Aug & Sep 1,538.76

**Fitchburg Gas and Electric Light Company
Sales and Demand Mode
Normalization Calculations**

Class Number = 8

G-51 GS Small Low Wtr Sales

Line No.	Month	Billing Cycle Customers	Billing Cycle Sales	Base Load per customer	Monthly		Colder Than Normal	Actual Unit		Weather Adjustment	Normal Heat Load	Normal Billing Cycle Therms	Average Use Per Customer	Billing Block Rate	Weather Adj. Rate	Revenue	Weather Adjustment
					Heating Load	Degree Days		Actual Degree Days	Heat Load Therms/DD								
1	November	294	46,358	33,764	12,594	686	589	97	18.36	(1,776)	10,818	44,582	158	\$ 0.21360	\$ 3,303	(\$379)	
2	December	285	50,713	32,731	17,983	787	881	(94)	22.85	2,146	20,129	52,859	178	\$ 0.21360	\$ 4,588	\$458	
3	January	298	82,757	34,223	48,534	1,262	1,252	10	38.46	(403)	48,130	82,354	278	\$ 0.21360	\$ (886)	(\$86)	
4	February	301	67,188	34,568	32,620	1,056	1,175	(119)	30.89	3,683	36,303	70,871	223	\$ 0.21360	\$ 787	\$787	
5	March	299	64,279	34,338	29,941	1,040	972	68	28.79	(1,953)	27,988	62,326	215	\$ 0.21360	\$ (417)	(\$417)	
6	April	302	55,307	34,683	20,624	631	740	(109)	32.68	3,559	24,163	58,866	183	\$ 0.21360	\$ 760	\$760	
7	May	299	42,975	34,338	8,637	275	395	(120)	31.41	3,783	12,419	46,757	144	\$ 0.21360	\$ 808	\$808	
8	June	299	41,141	34,338	6,802	85	165	(80)	80.03	6,408	13,210	47,548	138	\$ 0.21360	\$ 1,369	\$1,369	
9	July	299	34,856	34,338	517	33	28	5	15.68	(79)	439	34,777	117	\$ 0.21360	\$ (17)	(\$17)	
10	August	298	33,706	34,223	-	2	14	(12)	0.00	0	0	33,706	113	\$ 0.21360	\$ 0	\$0	
11	September	294	35,224	33,764	1,460	61	79	(18)	23.93	440	1,900	35,664	120	\$ 0.21360	\$ 94	\$94	
12	October	295	37,806	33,879	3,927	332	303	29	11.83	(346)	3,581	37,460	128	\$ 0.21360	\$ (74)	(\$74)	
13	Total	297	592,310	409,189	183,638	6,250	6,593	(343)		15,462	199,100	607,771	1,994		\$ 3,303	\$ 3,303	
14	Winter	297	366,603	204,307	162,295	5,462	5,609	(147)		5,256	167,551	371,858	1,235		\$ 1,123	\$ 1,123	
15	Summer	297	225,707	204,882	21,343	788	984	(196)		10,206	31,549	235,913	759		\$ 2,180	\$ 2,180	

Average Base Used Jul & Aug

114.84

**Fitchburg Gas and Electric Light Company
Sales and Demand Model
Normalization Calculations**

Class Number = 9

G-52 GS Med Low Wtr Sales

Line No.	Month	Billing Cycle		Base Load per customer	Heating Load	Monthly Degree Days		Colder (Warmer) Than Normal	Actual Unit Heat Load		Weather Adjustment	Normal Heat Load	Normal Firm Billing Cycle		Average Use Per Customer	Weather Adj. Billing Block Rate		Base Rate
		Customers	Sales			Actual	Normal		Therms/DD	Therms			Therms	Rate		Revenue	Weather Adjustment	
1	November	69	90,874	69,863	21,011	537	591	(54)	39.13	2,108	23,119	92,982	1,317	\$	0.19480	\$411		
2	December	61	86,763	61,763	25,019	700	875	(175)	35.74	6,243	31,263	93,026	1,423	\$	0.19480	\$1,216		
3	January	76	174,412	76,951	97,462	1,352	1,259	93	72.09	(6,673)	90,789	167,740	2,295	\$	0.19480	(\$1,300)		
4	February	74	143,820	74,926	68,894	1,124	1,170	(46)	61.30	2,838	71,732	146,658	1,944	\$	0.19480	\$553		
5	March	74	130,136	74,926	55,210	1,067	976	91	51.74	(4,696)	50,514	125,439	1,759	\$	0.19480	(\$915)		
6	April	74	121,747	74,926	46,821	806	743	64	58.08	(3,691)	43,131	118,057	1,645	\$	0.19480	(\$719)		
7	May	74	90,361	74,926	15,435	312	390	(78)	49.41	3,836	19,271	84,173	1,221	\$	0.19480	\$747		
8	June	74	89,732	74,926	14,806	182	163	19	81.25	(1,559)	13,247	73,957	1,030	\$	0.19480	(\$304)		
9	July	72	74,166	72,901	1,265	33	27	6	38.81	(209)	1,056	70,623	995	\$	0.19480	(\$41)		
10	August	71	70,623	71,888	-	10	13	(4)	0.00	0	0	75,229	1,048	\$	0.19480	\$0		
11	September	70	73,342	70,976	2,467	45	30	(34)	44.69	1,886	4,353	70,970	1,026	\$	0.19480	\$367		
12	October	69	70,815	69,863	952	263	306	(43)	3.62	155	1,107	70,970	1,026	\$	0.19480	\$30		
13	Total	72	1,216,811	868,735	349,342	6,431	6,593	(162)		239	349,581	1,217,051	16,914	\$		\$ 47		
14	Winter	71	747,772	433,355	314,417	5,586	5,614	(28)		-3,870	310,547	743,902	10,382	\$		(\$54)		
15	Summer	72	469,040	435,380	34,925	845	979	(134)		4,109	39,034	473,149	6,533	\$		\$ 800		
16	Average Base Used Jul & Aug			1,012.51														

**Fitchburg Gas and Electric Light Company
Sales and Demand Model
Normalization Calculations**

Class Number = 10

G-53 GS Large Low Wtr Sales

Line No.	Month	Billing Cycle Customers	Billing Cycle Sales	Base Load per customer \$248.27	Heating Load	Monthly Degree Days		Colder Than Normal	Warmer Than Normal	Actual Unit Heat Load Therms/DD	Weather Adjustment	Normal Heat Load	Normal Billing Cycle Therms	Average Use Per Customer	Weath Adj. Billing Block Rate	Base Rate Revenue	Weath Adjustment	
						Actual Degree Days	Normal Degree Days											
1	November	2	3,726	10,497	-	686	775	(89)	6	0.00	0	0	3,726	1,863	\$ 0.06800	\$0		
2	December	2	5,890	10,497	-	787	981	(194)	6	0.00	0	0	5,890	2,945	\$ 0.06800	\$0		
3	January	4	139,562	20,993	118,569	1,262	1,256	6	1	93.95	(542)	118,026	139,020	34,891	\$ 0.06800	(\$48)		
4	February	4	134,620	20,993	113,627	1,056	1,055	1	1	107.60	(55)	113,571	134,565	33,655	\$ 0.06800	(\$5)		
5	March	4	139,946	20,993	118,953	1,040	953	87	1	114.38	(9,897)	109,056	130,049	34,987	\$ 0.06800	(\$671)		
6	April	4	110,903	20,993	89,910	631	611	20	1	142.49	(2,846)	87,064	105,057	27,726	\$ 0.06800	(\$250)		
7	May	2	69,234	10,497	58,737	275	315	(40)	1	213.59	8,642	67,379	77,876	34,617	\$ 0.06800	\$761		
8	June	1	10,003	5,248	4,755	85	82	3	1	55.94	(178)	4,577	9,825	10,003	\$ 0.06800	(\$16)		
9	July	3	18,317	15,745	2,573	33	15	18	1	77.96	(1,404)	1,168	16,913	6,106	\$ 0.06800	(\$124)		
10	August	2	7,924	10,497	-	2	22	(20)	1	0.00	0	0	7,924	3,962	\$ 0.06800	\$0		
11	September	2	8,418	10,497	-	61	125	(64)	1	0.00	0	0	8,418	4,209	\$ 0.06800	\$0		
12	October	2	8,186	10,497	-	332	403	(71)	1	0.00	0	0	8,186	4,093	\$ 0.06800	\$0		
13	Total	3	656,730	167,945	507,124	6,250	6,593	(343)	1		(6,281)	500,843	650,450	199,056		\$ (553)		
14	Winter	3	534,648	104,965	441,059	5,482	5,632	(170)	1		-13,341	427,719	521,307	136,066		\$ (1,174)		
15	Summer	2	122,083	62,979	66,065	788	961	(173)	1		7,060	73,125	129,142	62,990		\$ 621		
16																		

Average Base Used Jul & Aug

5,248.27

**Fitchburg Gas and Electric Light Company
Sales and Demand Model
Normalization Calculations**

Class Number = 11

R-1 Resi Non-Heat Trans

Line No.	Month	Billing Cycle Customers	Billing Cycle Sales	Base Load per customer	Heating Load	Monthly Actual Degree Days	Monthly Normal Degree Days	Colder (Warmer) Than Normal	Actual Unit Heat Load Therms/DD	Weather Adjustment	Normal Heat Load	Normal Billing Cycle Therms	Average Use Per Customer	Weather Adj Billing Block Rate	Base Rate Revenue	Weather Adjustment
1	November	0	0	0	-	479	560	(71)	0.00	0.00	0	0	0	0	\$ 0.22450	\$0
2	December	0	0	0	-	666	847	(190)	0.00	0.00	0	0	0	0	\$ 0.22450	\$0
3	January	0	0	0	-	1,357	1,222	135	0.00	0.00	0	0	0	0	\$ 0.22450	\$0
4	February	0	0	0	-	1,163	1,202	(39)	0.00	0.00	0	0	0	0	\$ 0.22450	\$0
5	March	0	0	0	-	1,079	990	89	0.00	0.00	0	0	0	0	\$ 0.22450	\$0
6	April	0	0	0	-	878	782	96	0.00	0.00	0	0	0	0	\$ 0.22450	\$0
7	May	0	0	0	-	346	434	(88)	0.00	0.00	0	0	0	0	\$ 0.22450	\$0
8	June	0	0	0	-	233	193	40	0.00	0.00	0	0	0	0	\$ 0.22450	\$0
9	July	0	0	0	-	31	35	(4)	0.00	0.00	0	0	0	0	\$ 0.22450	\$0
10	August	0	0	0	-	13	11	2	0.00	0.00	0	0	0	0	\$ 0.22450	\$0
11	September	0	0	0	-	31	66	(35)	0.00	0.00	0	0	0	0	\$ 0.22450	\$0
12	October	0	0	0	-	215	261	(46)	0.00	0.00	0	0	0	0	\$ 0.22450	\$0
13																
14	Total	-	-	0	-	6,481	6,593	(112)	0	0	0	0	0	0	\$	\$
15	Winter	-	-	0	-	5,612	5,592	20	0	0	0	0	0	0	\$	\$
16	Summer	-	-	0	-	870	1,001	(132)	0	0	0	0	0	0	\$	\$

**Fitchburg Gas and Electric Light Company
Sales and Demand Model
Normalization Calculations**

Class Number = 12

R-2 Resi NH Low Inc Trans

Line No.	Month	Billing Cycle Customers	Billing Cycle Sales	Base Load per customer 0.00	Heating Load	Monthly Actual Degree Days	Monthly Normal Degree Days	Colder (Warmer) Than Normal	Actual Unit Heat Load Therms/DD	Weather Adjustment	Normal Heat Load	Normal Billing Cycle Therms	Average Use Per Customer	Weather Adj Billing Block Rate	Base Rate Revenue Weath Adjustment	
1	November	0	0	0	0	474	545	(71)	0.00	0.00	0	0	0	0	0.13470	\$0
2	December	0	0	0	0	661	851	(190)	0.00	0.00	0	0	0	0	0.13470	\$0
3	January	0	0	0	0	1,351	1,217	135	0.00	0.00	0	0	0	0	0.13470	\$0
4	February	0	0	0	0	1,169	1,210	(40)	0.00	0.00	0	0	0	0	0.13470	\$0
5	March	0	0	0	0	1,079	988	91	0.00	0.00	0	0	0	0	0.13470	\$0
6	April	0	0	0	0	879	783	96	0.00	0.00	0	0	0	0	0.13470	\$0
7	May	0	0	0	0	345	435	(90)	0.00	0.00	0	0	0	0	0.13470	\$0
8	June	0	0	0	0	235	194	40	0.00	0.00	0	0	0	0	0.13470	\$0
9	July	0	0	0	0	31	35	(4)	0.00	0.00	0	0	0	0	0.13470	\$0
10	August	0	0	0	0	13	11	2	0.00	0.00	0	0	0	0	0.13470	\$0
11	September	0	0	0	0	31	65	(34)	0.00	0.00	0	0	0	0	0.13470	\$0
12	October	0	0	0	0	214	260	(46)	0.00	0.00	0	0	0	0	0.13470	\$0
13	Total	-	0	0	0	6,482	6,593	(112)	0	0	0	0	0	0	\$	-
14	Winter	-	0	0	0	5,612	5,592	20	0	0	0	-	0	0	\$	-
15	Summer	-	0	0	0	869	1,001	(132)	0	0	0	-	0	0	\$	-

**Fitchburg Gas and Electric Light Company
Sales and Demand Model
Normalization Calculations**

Class Number = 13

R-3 Resi Heating Trans

Line No.	Month	Billing Cycle Customers	Billing Cycle Sales	Base Load per customer 0.00	Heating Load	Monthly Actual Degree Days	Monthly Normal Degree Days	Colder (Warmer) Than Normal	Actual Unit Heat Load Therms/DD	Weather Adjustment	Normal Heat Load	Normal Billing Cycle Therms	Average Use Per Customer	Weather Adj Billing Block Rate	Base Rate Revenue Weath Adjustment
1	November	0	0	0	-	484	555	(71)	0.00	0.00	0	0	0	0	\$0
2	December	0	0	0	-	682	852	(190)	0.00	0.00	0	0	0	0	\$0
3	January	0	0	0	-	1,360	1,226	133	0.00	0.00	0	0	0	0	\$0
4	February	0	0	0	-	1,159	1,194	(36)	0.00	0.00	0	0	0	0	\$0
5	March	0	0	0	-	1,076	989	86	0.00	0.00	0	0	0	0	\$0
6	April	0	0	0	-	870	776	95	0.00	0.00	0	0	0	0	\$0
7	May	0	0	0	-	343	427	(84)	0.00	0.00	0	0	0	0	\$0
8	June	0	0	0	-	227	189	38	0.00	0.00	0	0	0	0	\$0
9	July	0	0	0	-	31	35	(4)	0.00	0.00	0	0	0	0	\$0
10	August	0	0	0	-	13	12	1	0.00	0.00	0	0	0	0	\$0
11	September	0	0	0	-	32	63	(31)	0.00	0.00	0	0	0	0	\$0
12	October	0	0	0	-	221	269	(47)	0.00	0.00	0	0	0	0	\$0
13	Total	-	-	0	-	6,479	6,593	(114)	0.00	0.00	0	0	0	0	\$
14	Winter	-	-	0	-	5,611	5,593	18	0.00	0.00	0	0	0	0	\$
15	Summer	-	-	0	-	869	1,000	(131)	0.00	0.00	0	0	0	0	\$

**Fitchburg Gas and Electric Light Company
Sales and Demand Model
Normalization Calculations**

Class Number = 14

R-4 Resi Htg Low Inc Trans

Line No.	Month	Billing Cycle Customers	Billing Cycle Sales	Base Load per customer 0.00	Heating Load	Monthly Actual Degree Days		Monthly Normal Degree Days	Colder Than Normal		Actual Unit Heat Load		Weather Adjustment	Normal Heat Load	Normal Billing Cycle		Average Use Per Customer	Weather Adj Billing Block Rate	Base Rate Revenue	Weather Adjustment	
						Actual Degree Days	Normal Degree Days		Therm Normal	Therm	Therm	Therm			Therm	Therm					
1	November	0	0	0	-	479	561	561	(72)	0.00	0	0	0	0	0	0	0	0	\$ 0.15060	\$0	
2	December	0	0	0	-	662	856	856	(193)	0.00	0	0	0	0	0	0	0	0	0	\$ 0.15060	\$0
3	January	0	0	0	-	1,361	1,230	1,230	131	0.00	0	0	0	0	0	0	0	0	0	\$ 0.15060	\$0
4	February	0	0	0	-	1,163	1,203	1,203	(40)	0.00	0	0	0	0	0	0	0	0	0	\$ 0.15060	\$0
5	March	0	0	0	-	1,077	986	986	90	0.00	0	0	0	0	0	0	0	0	0	\$ 0.15060	\$0
6	April	0	0	0	-	870	774	774	96	0.00	0	0	0	0	0	0	0	0	0	\$ 0.15060	\$0
7	May	0	0	0	-	334	424	424	(91)	0.00	0	0	0	0	0	0	0	0	0	\$ 0.15060	\$0
8	June	0	0	0	-	228	188	188	40	0.00	0	0	0	0	0	0	0	0	0	\$ 0.15060	\$0
9	July	0	0	0	-	31	33	33	(2)	0.00	0	0	0	0	0	0	0	0	0	\$ 0.15060	\$0
10	August	0	0	0	-	12	12	12	1	0.00	0	0	0	0	0	0	0	0	0	\$ 0.15060	\$0
11	September	0	0	0	-	34	68	68	(34)	0.00	0	0	0	0	0	0	0	0	0	\$ 0.15060	\$0
12	October	0	0	0	-	222	270	270	(48)	0.00	0	0	0	0	0	0	0	0	0	\$ 0.15060	\$0
13	Total	-	-	0	-	6,473	6,593	6,593	(121)	0.00	0	0	0	0	0	0	0	0	0	\$ 0.15060	\$ -
14	Winter	-	-	0	-	5,611	5,598	5,598	13	0.00	0	0	0	0	0	0	0	0	0	\$ 0.15060	\$ -
15	Summer	-	-	0	-	861	995	995	(134)	0.00	0	0	0	0	0	0	0	0	0	\$ 0.15060	\$ -
16																					

**Fitchburg Gas and Electric Light Company
Sales and Demand Model
Normalization Calculations**

Class Number = 15

G-41 GS Small Hi Wtr Trans

Line No.	Month	Billing Cycle Customers	Billing Cycle Sales	Base Load per customer -481.06	Heating Load	Monthly Actual Degree Days	Monthly Normal Degree Days	Colder (Warmer) Than Normal	Actual Unit Heat Load Therms/DD	Weather Adjustment	Normal Heat Load	Normal Firm Billing Cycle Therms	Average Use Per Customer	Weather Adj Billing Block Rate	Base Rate Revenue	Weather Adjustment	
1	November	2	1,043	962	81	515	590	(75)	0.16	12	93	1,055	522	\$ 0.21360	\$3		
2	December	1	245	481	-	690	880	(189)	0.00	0	0	245	245	\$ 0.21360	\$0		
3	January	0	0	0	-	1,372	1,256	116	0.00	0	0	0	0	\$ 0.21360	\$0		
4	February	1	1,514	481	1,033	1,138	1,166	(28)	0.91	25	1,058	1,539	1,514	\$ 0.21360	\$5		
5	March	1	1,395	481	914	1,067	974	93	0.86	(80)	834	1,315	1,395	\$ 0.21360	(\$17)		
6	April	1	1,174	481	693	824	741	83	0.84	(70)	623	1,104	1,174	\$ 0.21360	(\$16)		
7	May	1	874	481	393	314	392	(78)	1.25	98	491	972	874	\$ 0.21360	\$21		
8	June	1	677	481	196	196	164	32	1.00	(32)	163	645	677	\$ 0.21360	(\$7)		
9	July	1	456	481	-	31	29	2	0.00	0	0	456	456	\$ 0.21360	\$0		
10	August	1	395	481	-	10	14	(4)	0.00	0	0	395	395	\$ 0.21360	\$0		
11	September	1	567	481	86	43	81	(37)	2.00	75	161	642	567	\$ 0.21360	\$16		
12	October	1	524	481	43	258	307	(49)	0.17	8	51	532	524	\$ 0.21360	\$2		
13																	
14	Total	1	8,864	5,773	3,438	6,460	6,583	(134)		36	3,474	8,899	8,342		\$ 8		
15	Winter	1	5,371	2,886	2,721	5,607	5,607	(0)		-113	2,608	5,258	4,849		\$ (24)		
16	Summer	1	3,493	2,886	717	853	986	(133)		149	866	3,641	3,493		\$ 32		

Average Base Used Aug & Sep 481.05

**Fitchburg Gas and Electric Light Company
Sales and Demand Model
Normalization Calculations**

Class Number = 16

G-42 GS Med Hi Wtr Trans

Line No.	Month	Billing Cycle Customers	Billing Cycle Sales	Base Load per customer	Heating Load	Monthly Actual Degree Days	Monthly Normal Degree Days	Colder (Warmer) Than Normal	Actual Unit Heat Load Therms/DD	Weather Adjustment	Normal Heat Load	Normal Billing Cycle Therms	Average Use Per Customer	Weather Adj Billing Block Rate	Base Rate Revenue Weather Adjustment
1	November	21	41,719	10,205	31,514	520	611	(91)	60.55	5,486	37,000	47,205	1,987	\$ 0.20250	\$ 1,111
2	December	22	65,503	10,691	54,811	675	892	(217)	81.26	17,631	72,443	83,134	2,977	\$ 0.20250	\$3,570
3	January	0	0	0	-	1,368	1,253	115	0.00	0	0	0	0	\$ 0.20250	\$0
4	February	8	12,470	3,888	8,583	1,195	1,150	(44)	7.56	108	8,690	12,578	1,559	\$ 0.20250	\$22
5	March	8	16,309	3,888	12,422	1,072	973	99	11.58	(1,146)	11,275	15,163	2,039	\$ 0.20250	(\$232)
6	April	8	12,379	3,888	8,491	827	731	97	10.26	(954)	7,497	11,385	1,547	\$ 0.20250	(\$201)
7	May	11	7,477	5,346	2,131	303	385	(82)	7.03	575	2,706	8,051	680	\$ 0.20250	\$116
8	June	9	5,770	4,374	1,396	200	155	45	6.97	(316)	1,080	5,454	641	\$ 0.20250	(\$64)
9	July	11	6,892	5,346	1,346	32	28	4	42.64	(160)	1,187	5,532	608	\$ 0.20250	(\$32)
10	August	11	4,000	5,346	-	10	15	(5)	0.00	0	0	4,000	364	\$ 0.20250	\$0
11	September	14	7,740	6,804	936	44	85	(41)	21.18	872	1,808	8,612	553	\$ 0.20250	\$177
12	October	16	16,679	7,776	8,903	252	316	(64)	35.30	2,267	11,170	18,946	1,042	\$ 0.20250	\$459
13	Total	12	196,737	67,551	130,533	6,440	6,593	(154)		24,322	154,855	221,060	13,997		\$ 4,925
14	Winter	11	148,380	32,560	115,820	5,588	5,608	(11)		21,085	136,905	169,466	10,109		\$ 4,270
15	Summer	12	48,357	34,990	14,713	841	984	(143)		3,237	17,950	51,594	3,888		\$ 656

Average Base Used Jul & Aug 485.98

Fitchburg Gas and Electric Light Company
Sales and Demand Model
Normalization Calculations

Class Number = 17

G-43 GS Large Hi Wtr Trans

Line No.	Month	Billing Cycle Customers	Billing Cycle Sales	Base Load per customer	Heating Load	Monthly Actual Degree Days	Monthly Normal Degree Days	Colder (Warmer) Than Normal	Actual Unit Heat Load Therms/DD	Weather Adjustment	Normal Heat Load	Normal Billing Cycle Therms	Average Use Per Customer	Weather Adj Billing Block Rate	Base Rate Revenue Weath Adjustment
1	November	5	62,622	13,406	49,216	515	775	(260)	85.63	24,875	74,091	87,497	12,524	\$ 0.09790	\$2,435
2	December	6	110,178	16,087	94,092	687	981	(293)	136.89	40,158	134,249	150,336	18,363	\$ 0.09790	\$3,931
3	January	4	184,350	10,724	173,625	1,363	1,256	107	127.35	(13,649)	159,976	170,701	46,087	\$ 0.09790	(\$1,336)
4	February	5	136,682	13,406	123,276	1,144	1,055	89	107.75	(9,549)	113,727	127,133	27,336	\$ 0.09790	(\$935)
5	March	6	121,454	16,087	105,368	1,068	953	114	98.67	(11,290)	94,078	110,164	20,242	\$ 0.09790	(\$1,105)
6	April	6	73,003	16,087	56,916	822	611	211	69.22	(14,618)	42,298	56,385	12,167	\$ 0.09790	(\$1,431)
7	May	3	27,540	8,043	19,497	312	315	(4)	62.59	247	19,744	27,788	9,180	\$ 0.09790	\$24
8	June	14	22,028	37,535	-	200	82	119	0.00	0	0	22,028	1,573	\$ 0.09790	\$0
9	July	6	14,083	16,087	-	31	15	16	0.00	0	0	14,083	2,347	\$ 0.09790	\$0
10	August	6	15,589	16,087	-	10	22	(12)	0.00	0	0	15,589	2,598	\$ 0.09790	\$0
11	September	6	16,585	16,087	498	41	125	(83)	12.01	1,003	1,501	17,587	2,764	\$ 0.09790	\$92
12	October	6	45,954	16,087	29,867	254	403	(148)	117.49	17,425	47,293	63,379	7,659	\$ 0.09790	\$1,706
13	Total	6	830,067	195,721	652,356	6,448	6,593	(145)		34,602	686,958	864,670	162,843		\$ 3,388
14	Winter	5	688,289	85,705	602,493	5,600	5,632	(32)		15,927	618,420	704,215	136,721		\$ 1,559
15	Summer	7	141,779	109,925	49,862	849	961	(113)		18,676	68,538	160,454	26,122		\$ 1,828

Average Base Used Aug & Sep

2,681.11

**Fitchburg Gas and Electric Light Company
Sales and Demand Model
Normalization Calculations**

Class Number = 12

G-51 GS Small Low Wtr Trans

Line No.	Month	Billing Cycle Customers	Billing Cycle Sales	Base Load per customer 0.00	Heating Load	Monthly Degree Days		Colder (Warmer) Than: Normal	Actual Unit Heat Load Therms/DD	Weather Adjustment	Normal Heat Load	Normal Billing Cycle Therms	Average Use Per Customer	Weather Adj Billing Block Rate	Base Rate Revenue Weath Adjustment
						Actual Degree Days	Normal Degree Days								
1	November	0	0	0	-	686	589	97	0.00	0.00	0	0	0	0	\$0
2	December	0	0	0	-	787	881	(94)	0.00	0.00	0	0	0	0	\$0
3	January	0	0	0	-	1,262	1,252	10	0.00	0.00	0	0	0	0	\$0
4	February	0	0	0	-	1,056	1,175	(119)	0.00	0.00	0	0	0	0	\$0
5	March	0	0	0	-	1,040	972	68	0.00	0.00	0	0	0	0	\$0
6	April	0	0	0	-	631	740	(109)	0.00	0.00	0	0	0	0	\$0
7	May	0	0	0	-	275	395	(120)	0.00	0.00	0	0	0	0	\$0
8	June	0	0	0	-	85	165	(80)	0.00	0.00	0	0	0	0	\$0
9	July	0	0	0	-	33	28	5	0.00	0.00	0	0	0	0	\$0
10	August	0	0	0	-	2	14	(12)	0.00	0.00	0	0	0	0	\$0
11	September	0	0	0	-	61	79	(18)	0.00	0.00	0	0	0	0	\$0
12	October	0	0	0	-	332	303	29	0.00	0.00	0	0	0	0	\$0
13	Total	-	-	0	-	6,290	6,593	(343)			0	0	0	0	\$ -
14	Winter	-	-	0	-	5,462	5,609	(147)			0	0	0	0	\$ -
15	Summer	-	-	0	-	788	984	(196)			0	0	0	0	\$ -

**Fitchburg Gas and Electric Light Company
Sales and Demand Model
Normalization Calculations**

Class Number = 19

G-52 GS Med Low Wtr Trans

Line No.	Month	Billing Cycle Customers	Billing Cycle Sales	Base Load per customer 831.17	Heating Load	Monthly Actual Degree Days	Monthly Normal Degree Days	Colder (Warmer) Than Normal	Actual Unit Heat Load Therms/DD	Weather Adjustment	Normal Heat Load	Normal Billing Cycle Therms	Average Use Per Customer	Weather Adj Billing Block Rate	Base Rate Revenue	Weather Adjustment	
1	November	7	8,473	5,818	2,654	537	591	(54)	4.94	266	2,921	8,739	1,210	0.19480	\$52		
2	December	9	11,548	7,481	4,068	700	875	(175)	5.81	1,015	5,083	12,563	1,283	0.19480	\$198		
3	January	0	0	0	0	1,352	1,259	93	0.00	0	0	0	0	0.19480	\$0		
4	February	3	4,263	2,494	1,769	1,124	1,170	(46)	1.57	73	1,842	4,336	1,421	0.19480	\$14		
5	March	3	4,141	2,494	1,647	1,067	976	64	1.54	(140)	1,507	4,001	1,380	0.19480	(\$27)		
6	April	3	3,290	2,494	796	806	743	64	0.99	(63)	733	3,227	1,097	0.19480	(\$12)		
7	May	3	2,392	2,494	-	312	390	(78)	0.00	0	0	2,392	797	0.19480	\$0		
8	June	3	3,070	2,494	576	182	163	19	3.16	(61)	515	3,009	1,023	0.19480	(\$12)		
9	July	4	645	3,325	-	33	27	5	0.00	0	0	645	161	0.19480	\$0		
10	August	5	3,580	4,156	-	10	13	(4)	0.00	0	0	3,580	716	0.19480	\$0		
11	September	6	4,311	4,987	-	45	80	(34)	0.00	0	0	4,311	718	0.19480	\$0		
12	October	7	6,133	5,818	314	263	306	(43)	1.19	51	366	6,184	876	0.19480	\$10		
13																	
14	Total	4	51,844	44,052	11,825	6,431	6,593	(162)		1,142	12,967	52,986	10,694		\$ 222		
15	Winter	4	31,714	20,779	10,935	5,586	5,614	(28)		1,151	12,086	32,865	6,391		\$ 224		
16	Summer	5	20,130	23,273	890	845	979	(134)		-9	881	20,121	4,292		\$ (2)		

Average Base Used Jun & Aug 831.17

**Fitchburg Gas and Electric Light Company
Sales and Demand Model
Normalization Calculations**

Class Number = 23

G-53 GS Large Low Wtr Trans

Line No.	Month	Billing Cycle Customers	Billing Cycle Sales	Base Load per customer	Heating Load	Monthly Actual Degree Days	Monthly Normal Degree Days	Colder (Warmer) Than Normal	Actual Unit Heat Load Therms/DD	Weather Adjustment	Normal Heat Load	Normal Firm Billing Cycle Therms	Average Use Per Customer	Weather Adj Billing Block Rate	Base Rate Revenue Weath Adjustment
1	November	8	195,921	148,663	47,258	686	775	(89)	68.89	6,118	53,376	202,039	24,490	\$ 0.08800	\$538
2	December	7	166,769	130,080	36,689	787	981	(194)	46.62	9,031	45,720	175,800	23,824	\$ 0.08800	\$795
3	January	7	226,770	130,080	96,690	1,262	1,256	6	76.62	(442)	96,248	226,328	32,396	\$ 0.08800	(\$39)
4	February	7	179,707	130,080	49,627	1,056	1,056	1	47.00	(24)	49,603	179,683	25,672	\$ 0.08800	(\$2)
5	March	7	192,883	130,080	62,803	1,040	953	87	60.39	(5,225)	57,578	187,658	27,555	\$ 0.08800	(\$460)
6	April	7	139,345	130,080	9,265	631	611	20	14.68	(293)	8,972	139,052	19,906	\$ 0.08800	(\$26)
7	May	9	113,042	167,246	-	275	315	(40)	0.00	0	0	113,042	12,560	\$ 0.08800	\$0
8	June	8	154,236	148,663	5,573	85	82	3	65.57	(209)	5,364	154,027	19,280	\$ 0.08800	(\$18)
9	July	8	145,563	148,663	-	33	15	18	0.00	0	0	145,563	18,195	\$ 0.08800	\$0
10	August	8	151,763	148,663	-	2	22	(20)	0.00	0	0	151,763	18,970	\$ 0.08800	\$0
11	September	8	120,856	148,663	-	61	125	(64)	0.00	0	0	120,856	15,107	\$ 0.08800	\$0
12	October	8	194,174	148,663	45,511	332	403	(71)	137.08	9,670	55,181	203,844	24,272	\$ 0.08800	\$851
13															
14	Total	8	1,981,030	1,709,625	353,416	6,250	6,593	(343)		18,624	372,041	1,999,655	262,228		\$ 1,639
15	Winter	7	1,101,386	799,064	302,332	5,462	5,632	(170)		9,163	311,495	1,110,559	153,844		\$ 806
16	Summer	8	879,634	910,561	51,084	788	961	(173)		9,461	60,545	889,095	108,384		\$ 833

Average Base Used Jul & Aug 18,582.88

**Fitchburg Gas and Electric Light Company
Sales and Demand Model
Summary of Billing Month Normalized Sales**

BILLING MONTH	November 2001	December 2001	January 2001	February 2001	March 2001	April 2001	May 2001	June 2001	July 2001	August 2001	September 2001	October 2001	TOTAL	WINTER	SUMMER
SALES - Therms															
1 R-1 Resi Non-Heat Sales	58,269	66,629	84,299	75,326	85,780	51,534	62,286	51,061	41,597	27,369	50,535	38,008	692,692	421,837	270,855
2 R-2 Resi NH Low Inc Sales	3,704	5,306	5,554	5,385	5,125	5,196	5,367	3,818	3,663	2,299	2,749	2,965	51,121	30,269	20,851
3 R-3 Resi Heating Sales	710,910	1,087,805	1,752,355	1,717,697	1,414,089	1,024,041	589,171	301,100	205,080	181,242	208,866	328,031	9,518,396	7,706,906	1,811,490
4 R-4 Resi Hg Low Inc Sales	79,348	118,361	136,345	142,626	123,265	116,522	73,544	43,445	28,982	42,590	42,590	29,204	959,923	716,487	243,436
5 G-41 GS Small HI Wtr Sales	141,842	208,993	471,790	416,636	333,447	229,237	89,302	29,638	17,731	21,506	10,772	43,322	2,014,506	1,801,935	212,571
6 G-42 GS Med HI Wtr Sales	262,478	397,871	679,725	601,469	488,542	298,651	202,437	69,989	45,892	32,202	54,761	118,859	3,262,856	2,728,735	524,120
7 G-43 GS Large HI Wtr Sales	128,502	173,838	290,598	166,670	155,589	70,563	35,392	15,069	11,735	10,228	15,485	73,888	1,147,577	985,779	161,798
8 G-51 GS Small Low Wtr Sale	44,562	52,859	82,354	70,871	62,326	58,866	46,757	47,548	34,777	33,706	35,664	37,460	607,771	371,858	235,913
9 G-52 GS Med Low Wtr Sales	92,962	93,026	167,740	146,658	125,439	118,057	94,197	88,173	73,957	70,623	75,229	70,970	1,217,051	743,902	473,149
10 G-53 GS Large Low Wtr Sale	3,726	5,890	139,020	134,565	130,049	108,057	77,876	9,825	16,913	7,924	8,418	8,186	650,450	521,307	129,142
11 R-1 Resi Non-Heat Trans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12 R-2 Resi NH Low Inc Trans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13 R-3 Resi Heating Trans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14 R-4 Resi Hg Low Inc Trans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15 G-41 GS Small HI Wtr Trans	1,055	245	0	1,559	1,315	1,104	972	645	456	395	642	532	8,899	5,258	3,641
16 G-42 GS Med HI Wtr Trans	47,205	83,134	0	12,576	15,163	11,385	8,051	5,454	6,532	4,000	8,612	18,946	221,060	169,465	51,594
17 G-43 GS Large HI Wtr Trans	87,497	150,336	170,701	127,133	110,164	58,385	27,788	22,028	14,093	15,588	17,587	63,379	864,670	704,215	160,454
18 G-51 GS Small Low Wtr Trans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19 G-52 GS Med Low Wtr Trans	8,739	12,563	0	4,336	4,001	3,227	2,392	3,009	645	3,580	4,311	6,184	52,986	32,865	20,121
20 G-53 GS Large Low Wtr Tran	202,039	175,800	226,328	179,663	187,658	139,052	113,042	154,027	145,563	151,763	120,856	203,844	1,999,655	1,110,559	869,095
21 Total	1,872,877	2,632,645	4,206,808	3,803,173	3,241,982	2,293,895	1,428,574	845,409	647,606	587,796	657,078	1,041,767	23,259,611	18,051,380	5,208,231
22 Total Sales	1,526,343	2,210,567	3,809,779	3,477,903	2,923,681	2,080,743	1,276,329	660,247	480,327	412,470	505,070	748,863	20,112,342	16,029,016	4,083,325
23 Total Transportation	346,534	422,078	397,029	325,269	318,301	213,152	152,245	185,163	167,279	175,326	152,008	292,885	3,147,270	2,022,364	1,124,906

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**Fitchburg Gas and Electric Light Company
Sales and Demand Model**

RR-DTE-14 (Gas)
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Summary of Billing Month Normalized Sales Corrections

November 2001	December 2001	January 2001	February 2001	March 2001	April 2001	May 2001	June 2001	July 2001	August 2001	September 2001	October 2001	TOTAL	WINTER	SUMMER
(75)	(146)	51	(17)	42	55	(128)	86	(62)	-	(566)	(107)	(867)	(90)	(778)
52	103	(39)	14	(34)	(45)	101	(71)	47	-	264	83	476	51	425
165	325	(115)	36	(94)	(124)	275	(185)	142	-	1,175	238	1,838	193	1,645
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
(311)	(350)	89	72	88	211	(7)	486	-	-	(1,093)	(479)	(1,295)	(202)	(1,093)
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
(9)	(18)	-	(0)	2	2	(7)	5	3	-	(32)	(10)	(65)	(23)	(42)
527	534	(66)	(81)	(134)	(321)	8	-	-	885	2,518	730	4,800	459	4,141
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
254	812	-	45	(92)	(86)	245	(114)	-	481	1,143	413	3,100	833	2,167
604	1,260	(80)	68	(222)	(308)	487	207	130	1,366	3,409	868	7,788	1,322	6,466
(168)	(66)	(15)	104	2	97	242	316	127	-	(220)	(265)	152	(46)	200
772	1,329	(66)	(36)	(225)	(404)	245	(109)	3	1,366	3,629	1,133	7,836	1,370	6,266

**Fitchburg Gas and Electric Light Company
Sales and Demand Model**

Summary of Billing Month Normalized Sales Corrections

	November 2001	December 2001	January 2001	February 2001	March 2001	April 2001	May 2001	June 2001	July 2001	August 2001	September 2001	October 2001	TOTAL	WINTER	SUMMER
	-0.1%	-0.2%	0.1%	0.0%	0.0%	0.1%	-0.2%	0.2%	-0.1%	0.0%	-1.1%	-0.3%	-0.1%	0.0%	-0.3%
	1.4%	1.5%	-0.7%	0.3%	-0.7%	-0.9%	1.5%	-1.9%	1.3%	0.0%	9.5%	2.8%	0.9%	0.2%	2.0%
	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%	0.1%	0.0%	0.6%	0.1%	0.0%	0.0%	0.1%
	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	-0.2%	-0.2%	0.0%	0.0%	0.1%	0.3%	0.0%	3.2%	0.0%	0.0%	-7.1%	-0.6%	-0.1%	0.0%	-0.7%
	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	0.0%	0.4%	0.0%	-0.1%	-0.1%	-0.8%	0.0%	0.1%	0.0%	5.7%	14.3%	1.2%	0.5%	0.1%	2.6%
	2.5%	6.5%	0.0%	1.0%	-2.3%	-2.7%	10.2%	-3.8%	0.0%	13.4%	26.5%	6.7%	5.9%	2.8%	10.8%
	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.5%	0.1%	0.03%	0.0%	0.1%
	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	0.2%	0.3%	0.0%	0.0%	-0.1%	-0.2%	0.2%	-0.1%	0.0%	0.8%	2.4%	0.4%	0.2%	0.1%	0.6%

**Fitchburg Gas and Electric Light Company
Sales and Demand Model
Normalization Calculations**

Class Number = 1

R-1 Resi Non-Heat Sales

Line No.	Month	Billing Cycle Customers	Billing Cycle Sales	Base Load per customer 11/78	Heating Load	Monthly Actual Degree Days	Monthly Normal Degree Days	Colder (Warmer) Than Normal	Actual Unit Heat Load Therms/DD	Weather Adjustment	Normal Heat Load	Normal Billing Cycle Therms	Average Use Per Customer	Weather Adj Billing Block Rate	Base Rate Revenue	Weather Adjustment
1	November	2,896	55,144	34,056	21,089	479	550	(71)	44.06	3,125	24,213	58,269	19	\$ 0.22450	\$701	
2	December	2,898	59,317	34,079	25,237	656	847	(190)	38.44	7,312	32,550	66,629	20	\$ 0.22450	\$1,642	
3	January	2,940	89,799	34,573	55,226	1,357	1,222	135	40.70	(5,500)	49,725	84,299	31	\$ 0.22450	(\$1,235)	
4	February	2,932	73,996	34,479	39,517	1,163	1,202	(39)	33.97	1,331	40,847	75,326	25	\$ 0.22450	\$299	
5	March	2,935	90,385	34,514	55,871	1,079	990	89	51.79	(4,605)	51,266	86,780	31	\$ 0.22450	(\$1,034)	
6	April	2,896	53,677	34,056	19,621	878	782	96	22.35	(2,143)	17,478	51,534	19	\$ 0.22450	(\$481)	
7	May	2,907	56,599	34,185	22,414	346	434	(88)	64.70	5,687	28,101	62,286	19	\$ 0.22450	\$1,277	
8	June	2,897	54,566	34,068	20,499	233	193	40	88.08	(3,506)	16,993	51,061	19	\$ 0.22450	(\$787)	
9	July	2,887	40,755	33,950	6,805	31	35	(4)	217.69	842	7,647	41,597	14	\$ 0.22450	\$189	
10	August	2,906	27,369	34,173	-	13	11	2	0.00	0	0	27,369	9	\$ 0.22450	\$0	
11	September	2,862	41,702	33,891	7,811	31	66	(35)	252.29	8,833	16,643	50,535	14	\$ 0.22450	\$1,983	
12	October	2,872	37,281	33,774	3,487	215	261	(46)	16.20	747	4,234	36,008	13	\$ 0.22450	\$168	
13	Total	2,904	680,571	409,799	277,576	6,481	6,593	(112)		12,122	289,698	692,692	234		\$ 2,721	
14	Winter	2,916	422,319	205,758	216,561	5,612	5,592	20		-481	216,079	421,837	145		\$ (108)	
15	Summer	2,892	258,252	204,041	61,016	870	1,001	(132)		12,603	73,619	270,855	89		\$ 2,829	

Average Base Used Jul & Aug 11.76

**Fitchburg Gas and Electric Light Company
Sales and Demand Model
Normalization Calculations**

Class Number = 2

R-2 Resi NH Low Inc Sales

Line No.	Month	Billing Cycle Customers	Billing Cycle Sales	Base Load per customer 14.90	Heating Load	Monthly Actual Degree Days	Monthly Normal Degree Days	Colder Than Normal (Warmer)	Actual Unit Heat Load Therms/DD	Weather Adjustment	Normal Heat Load	Normal Billing Cycle Therms	Average Firm Use Per Customer	Weather Adj Billing Block Rate	Base Rate Revenue Weath Adjustment
1	November	173	3,557	2,578	979	474	545	(71)	2.07	147	1,126	3,704	21	\$ 0.13470	\$20
2	December	176	4,705	2,623	2,082	661	851	(190)	3.15	600	2,663	5,306	27	\$ 0.13470	\$81
3	January	193	5,851	2,876	2,974	1,351	1,217	135	2.20	(297)	2,678	5,554	30	\$ 0.13470	(\$40)
4	February	199	5,304	2,966	2,339	1,169	1,210	(40)	2.00	81	2,419	5,385	27	\$ 0.13470	\$11
5	March	199	5,323	2,966	2,358	1,079	988	91	2.19	(198)	2,159	5,125	27	\$ 0.13470	(\$27)
6	April	203	5,462	3,025	2,437	879	783	96	2.77	(266)	2,171	5,196	27	\$ 0.13470	(\$36)
7	May	193	4,854	2,876	1,978	345	435	(90)	5.73	513	2,490	5,367	25	\$ 0.13470	\$69
8	June	204	3,980	3,040	939	235	194	40	4.00	(161)	778	3,818	20	\$ 0.13470	(\$22)
9	July	198	3,587	2,951	636	31	35	(4)	20.32	75	712	3,663	18	\$ 0.13470	\$10
10	August	197	2,299	2,936	-	13	11	2	0.00	0	0	2,299	12	\$ 0.13470	\$0
11	September	195	2,749	2,906	-	31	65	(34)	0.00	0	0	2,749	14	\$ 0.13470	\$0
12	October	191	2,935	2,847	89	214	260	(46)	0.42	19	108	2,955	15	\$ 0.13470	\$3
13	Total	193	50,609	34,591	16,811	6,482	6,593	(112)		512	17,323	51,121	262		\$ 1.11
14	Winter	191	30,204	17,035	13,169	5,612	5,592	20		66	13,235	30,269	158		\$ 9
15	Summer	196	20,405	17,556	3,642	869	1,001	(132)		446	4,088	20,851	104		\$ 60
16															
Average Base Used Jul & Aug															
14.90															
2,951															
75															
3,026															

**Fitchburg Gas and Electric Light Company
Sales and Demand Model
Normalization Calculations**

Class Number = 3

R-3 Resi Heating Sales

Line No.	Month	Billing Cycle Customers	Billing Cycle Sales	Base Load per customer 21.78	Heating Load	Monthly Actual Degree Days	Monthly Normal Degree Days	Monthly (Warmer) Than Normal	Colder (Warmer) Than Normal	Actual Unit Heat Load Therms/DD	Weather Adjustment	Normal Heat Load	Normal Billing Cycle Therms	Average Use Per Customer	Weather Adj Billing Block Rate	Base Rate Revenue Weath Adjustment
1	November	9,005	645,165	196,118	449,046	484	555	(71)	555	926.91	66,745	514,791	710,910	72	\$ 0.25100	\$16,502
2	December	9,047	889,233	197,033	692,199	662	852	(190)	852	1,045.53	196,572	890,771	1,087,805	98	\$ 0.25100	\$49,842
3	January	9,377	1,920,737	204,220	1,716,517	1,360	1,226	133	1,226	1,262.55	(168,382)	1,548,135	1,752,355	205	\$ 0.25100	(\$42,264)
4	February	9,278	1,672,382	202,064	1,470,318	1,159	1,194	(36)	1,194	1,268.86	45,315	1,515,633	1,717,697	180	\$ 0.25100	\$11,374
5	March	9,365	1,519,469	203,959	1,315,510	1,076	989	86	989	1,223.10	(105,370)	1,210,140	1,414,099	162	\$ 0.25100	(\$26,448)
6	April	9,098	1,124,898	198,144	926,754	870	776	95	776	1,064.67	(100,857)	825,897	1,024,041	124	\$ 0.25100	(\$25,315)
7	May	8,976	511,775	195,487	316,288	343	427	(84)	427	921.53	77,396	393,684	589,171	57	\$ 0.25100	\$19,426
8	June	8,789	323,233	191,414	131,819	227	189	38	189	580.17	(22,134)	109,686	301,100	37	\$ 0.25100	(\$5,566)
9	July	8,823	203,612	192,155	11,457	31	35	(4)	35	373.51	1,468	12,925	205,080	23	\$ 0.25100	\$369
10	August	8,848	181,242	192,699	-	13	12	1	12	0.00	0	0	181,242	20	\$ 0.25100	\$0
11	September	8,858	200,662	192,917	7,745	33	68	(35)	68	233.13	8,204	15,949	208,866	23	\$ 0.25100	\$2,059
12	October	8,898	302,771	193,788	108,983	221	269	(47)	269	492.27	23,260	132,243	326,031	34	\$ 0.25100	\$5,838
14	Total	9,030	9,495,179	2,359,998	7,146,638	6,479	6,593	(114)	6,593	23,217	23,217	7,169,855	9,516,396	1,035		\$ 5,827
15	Winter	9,195	7,771,884	1,201,538	6,570,346	5,611	5,593	18	5,593	-64,978	-64,978	6,505,368	7,706,906	841		(\$ 16,309)
16	Summer	8,865	1,723,295	1,158,460	576,292	869	1,000	(131)	1,000	86,195	86,195	664,487	1,811,490	194		\$ 22,137

Average Base Used Jul & Aug 21.78

**Fitchburg Gas and Electric Light Company
Sales and Demand Model
Normalization Calculations**

Class Number = 4

R-4 Resi Htg Low Inc Sales

Line No.	Month	Billing Cycle Customers	Billing Cycle Sales	Base Load per customer	Heating Load	Monthly Actual Degree Days	Monthly Normal Degree Days	Colder Than Normal	Actual Unit Heat Load	Weather Adjustment	Normal Heat Load	Normal Firm Billing Cycle Therms	Average Use Per Customer	Weather Adj Billing Block Rate	Base Rate Revenue	Weather Adjustment
1	November	1,100	72,621	23,678	48,943	479	551	(72)	102.19	7,323	56,266	79,944	66	0.15060	\$1,103	
2	December	1,109	97,912	23,872	74,040	662	856	(193)	111.81	21,622	95,662	119,534	88	0.15060	\$3,256	
3	January	874	148,563	18,814	129,750	1,361	1,230	131	95.34	(12,523)	117,226	136,040	170	0.15060	(\$1,886)	
4	February	896	138,649	19,287	119,362	1,163	1,203	(40)	102.65	4,068	123,450	142,737	155	0.15060	\$616	
5	March	917	132,480	19,739	112,741	1,077	986	90	104.73	(9,475)	103,266	123,006	144	0.15060	(\$1,427)	
6	April	1,085	127,634	23,356	104,278	870	774	42	119.88	(11,547)	92,731	116,087	118	0.15060	(\$1,739)	
7	May	1,172	64,131	25,228	38,903	334	424	(91)	116.63	10,566	49,468	74,697	55	0.15060	\$1,591	
8	June	1,284	46,209	27,639	18,570	228	188	40	81.34	(3,287)	15,283	42,922	23	0.15060	(\$495)	
9	July	1,277	28,982	27,489	1,494	31	33	(2)	48.75	120	1,613	29,102	23	0.15060	\$18	
10	August	1,248	25,371	26,964	-	12	12	0	0.00	0	0	25,371	20	0.15060	\$0	
11	September	1,218	36,644	26,219	10,426	34	68	(34)	303.37	10,306	20,732	46,951	30	0.15060	\$1,562	
12	October	1,207	29,204	25,982	3,222	222	270	(48)	14.49	692	3,915	29,897	24	0.15060	\$104	
13	Total	1,116	948,401	288,167	661,728	6,473	6,593	(121)		17,885	679,613	966,286	929		\$ 2,694	
14	Winter	997	717,860	128,746	589,113	5,611	5,995	13		-512	588,602	717,348	741		\$ (77)	
15	Summer	1,234	230,542	159,421	72,615	861	995	(134)		18,397	91,012	248,939	188		\$ 2,771	
16	Average Base Used Jul & Aug			21.53												

**Fitchburg Gas and Electric Light Company
Sales and Demand Model
Normalization Calculations**

Class Number = 6

G-42 GS Med Hi Wtr Sales

Line No.	Month	Billing Cycle Customers	Billing Cycle Sales	Base Load per customer 272.15	Heating Load	Monthly Degree Days		Colder (Warmer) Than Normal	Actual Unit Heat Load Therms/DD		Weather Adjustment	Normal Heat Load	Normal Billing Cycle Therms	Average Use Per Customer	Weather Adj Billing Block Rate	Base Rate Revenue Weath Adjustment
						Actual Degree Days	Normal Degree Days		Heat Load	Therms/DD						
1	November	140	229,288	38,101	191,187	520	611	(91)	367.34	33,281	224,467	262,568	1,638	\$ 0.20250	\$6,739	
2	December	170	312,449	46,266	266,184	675	892	(217)	394.61	85,625	351,808	398,074	1,838	\$ 0.20250	\$17,339	
3	January	155	738,423	42,183	696,239	1,368	1,253	115	508.93	(58,746)	637,493	679,676	4,764	\$ 0.20250	(\$11,896)	
4	February	145	594,507	39,462	555,045	1,135	1,150	(14)	488.86	6,969	562,014	601,475	4,100	\$ 0.20250	\$1,411	
5	March	148	534,051	40,278	493,773	1,072	973	99	460.44	(45,560)	448,213	488,491	3,608	\$ 0.20250	(\$9,226)	
6	April	146	322,898	39,734	283,164	827	731	97	354.30	(34,310)	258,854	298,588	2,280	\$ 0.20250	(\$6,948)	
7	May	150	168,224	40,823	127,401	303	385	(82)	420.27	34,363	161,765	202,588	1,121	\$ 0.20250	\$6,959	
8	June	146	78,663	39,734	38,929	200	155	45	194.43	(8,817)	30,112	69,846	539	\$ 0.20250	(\$1,785)	
9	July	144	46,722	39,190	7,532	32	28	4	238.58	(893)	6,639	45,829	324	\$ 0.20250	(\$181)	
10	August	146	32,202	39,734	-	10	15	(5)	0.00	0	0	32,202	221	\$ 0.20250	\$0	
11	September	142	47,246	38,645	8,600	44	65	(41)	194.54	8,005	16,606	55,251	333	\$ 0.20250	\$1,621	
12	October	142	102,688	38,645	64,043	262	316	(64)	263.90	16,306	80,348	118,993	723	\$ 0.20250	\$3,302	
13	Total	148	3,217,359	482,795	2,742,096	6,440	6,593	(154)		36,222	2,778,319	3,253,582	21,490		\$ 7,385	
14	Winter	151	2,741,615	246,024	2,495,591	5,598	5,609	(11)		-12,742	2,482,849	2,728,873	18,228		\$ (2,580)	
15	Summer	145	475,744	236,771	246,506	841	984	(143)		48,965	295,470	524,709	3,261		\$ 9,915	

Average Base Used Jul & Aug

272.15

**Fitchburg Gas and Electric Light Company
Sales and Demand Model
Normalization Calculations**

Class Number = 7

G-43 GS Large Hi Wtr Sales

Line No.	Month	Billing Cycle Customers	Billing Cycle Sales	Base Load per customer	Heating Load	Monthly Actual Degree Days	Monthly Normal Degree Days	Colder Than Normal	Warmer Than Normal	Actual Unit Heat Load Therms/DD	Weather Adjustment	Normal Heat Load	Normal Billing Cycle Therms	Average Use Per Customer	Weather Adj Billing Block Rate	Base Rate Revenue	Weather Adjustment	
1	November	6	88,459	8,785	79,674	515	775	(260)	775	154.80	40,269	119,942	128,728	14,743	0.09790	\$3,942		
2	December	8	125,521	11,714	113,807	687	981	(293)	981	165.57	48,572	162,379	174,092	15,690	0.09790	\$4,755		
3	January	11	313,947	16,106	297,841	1,363	1,256	107	1,256	218.45	(23,414)	274,427	290,534	28,541	0.09790	(\$2,292)		
4	February	9	179,501	13,178	166,323	1,144	1,055	89	1,055	145.37	(12,883)	153,440	166,618	19,945	0.09790	(\$1,261)		
5	March	8	172,784	11,714	161,070	1,068	953	114	953	150.83	(17,259)	143,811	156,525	21,598	0.09790	(\$1,690)		
6	April	8	90,722	11,714	79,008	822	611	211	611	96.09	(20,292)	58,716	70,430	11,340	0.09790	(\$1,987)		
7	May	5	36,046	7,321	27,724	312	315	(4)	315	89.00	(4,351)	28,076	35,397	7,009	0.09790	\$34		
8	June	8	19,066	11,714	7,354	200	82	119	82	36.70	(11)	3,003	14,717	2,384	0.09790	(\$426)		
9	July	8	11,735	11,714	21	31	15	16	15	0.68	(11)	10	11,724	1,467	0.09790	(\$1)		
10	August	7	10,228	10,249	-	10	22	(12)	22	0.00	0	0	10,228	1,461	0.09790	\$0		
11	September	3	14,392	13,173	1,214	41	125	(83)	125	29.28	2,444	3,658	16,836	1,599	0.09790	\$239		
12	October	8	51,199	11,714	39,485	254	403	(148)	403	155.32	23,037	62,522	74,236	6,400	0.09790	\$2,255		
13																		
14	Total	8	1,112,600	139,100	973,522	6,448	6,593	(145)	6,593		36,463	1,009,985	1,149,063	132,176		\$	3,570	
15	Winter	8	970,933	73,210	897,722	5,600	5,632	(32)	5,632		14,993	912,716	985,926	111,857		\$	1,468	
16	Summer	8	141,667	65,889	75,799	849	961	(113)	961		21,470	97,269	163,137	20,320		\$	2,102	

Average Base Used Jul & Aug

1,464.21

**Fitchburg Gas and Electric Light Company
Sales and Demand Mode
Normalization Calculation:**

Class Number = 8

G-51 GS Small Low Wtr Sales

Line No.	Month	Billing Cycle Customers	Billing Cycle Sales	Base Load per customer	Heating Load	Monthly Actual Degree Days	Monthly Normal Degree Days	Colder Than Normal	Actual Unit Heat/Load	Weather Adjustment	Normal Heat Load	Normal Billing Cycle Thems	Average Use Per Customer	Weather Adj Billing Block Rate	Base Rate Revenue	Weath Adjustment	
1	November	294	46,358	33,764	12,594	686	589	97	18.36	(1,776)	10,818	44,582	158	\$ 0.21360	\$ (3,379)		
2	December	285	50,713	32,731	17,983	787	881	(94)	22.85	2,146	20,129	52,859	178	\$ 0.21360	\$ 458		
3	January	298	82,757	34,223	48,534	1,262	1,252	10	38.46	(403)	48,130	82,354	278	\$ 0.21360	\$ (86)		
4	February	301	67,188	34,568	32,620	1,056	1,175	(119)	30.89	3,663	36,303	70,871	223	\$ 0.21360	\$ 787		
5	March	299	64,279	34,388	29,941	1,040	972	68	28.79	(1,953)	27,988	62,326	215	\$ 0.21360	\$ (417)		
6	April	302	55,307	34,683	20,624	631	740	(109)	32.66	3,589	24,183	58,866	183	\$ 0.21360	\$ 760		
7	May	299	42,975	34,338	8,637	275	395	(120)	31.41	3,783	12,419	46,757	144	\$ 0.21360	\$ 808		
8	June	299	41,141	34,338	6,802	85	165	(80)	80.03	6,408	13,210	47,548	138	\$ 0.21360	\$ 1,369		
9	July	299	34,856	34,338	517	33	28	5	15.68	(79)	439	34,777	117	\$ 0.21360	\$ (17)		
10	August	298	33,706	34,223	1,460	2	14	(12)	0.00	440	0	33,706	113	\$ 0.21360	\$ 0		
11	September	294	35,224	33,764	1,460	61	79	(18)	23.93	440	1,900	35,664	120	\$ 0.21360	\$ 94		
12	October	295	37,806	33,879	3,927	332	303	29	11.83	(346)	3,581	37,460	128	\$ 0.21360	\$ (74)		
13	Total	297	592,310	409,189	183,638	6,250	6,593	(343)		15,462	199,100	607,771	1,994		\$ 3,303		
14	Winter	297	366,603	204,307	162,295	5,462	5,609	(147)		5,256	167,551	371,858	1,235		\$ 1,123		
15	Summer	297	225,707	204,882	21,343	788	984	(196)		10,206	31,549	235,913	759		\$ 2,180		
16	Average Base Used Jul & Aug			114.84													

Fitchburg Gas and Electric Light Company
Sales and Demand Model
Normalization Calculations

Class Number = 9

G-52 GS Med Low Wtr Sales

Line No.	Month	Billing Cycle Customers	Billing Cycle Sales	Base Load per customer 1,012.51	Monthly Heating Load		Monthly Degree Days		Colder (Warmer) Than Normal	Actual Unit Heat Load		Weather Adjustment	Normal Heat Load	Normal Billing Cycle Therms	Average Use Per Customer	Weather Adj. Billing Block Rate	Base Rate Revenue	Weather Adjustment
					Heating Load	Actual Degree Days	Normal Degree Days	Actual Heat Load		Therms/DD								
1	November	69	90,874	69,863	21,011	537	591	(54)	39.13	2,108	23,119	92,982	1,317	0.19480	\$411			
2	December	61	86,783	61,763	25,019	700	875	(175)	35.74	6,243	31,263	93,026	1,423	0.19480	\$1,216			
3	January	76	174,412	76,951	97,462	1,352	1,259	93	72.09	(6,673)	90,788	167,740	2,295	0.19480	(\$1,300)			
4	February	74	143,820	74,926	68,894	1,124	1,170	(46)	61.30	2,838	71,732	146,668	1,944	0.19480	\$553			
5	March	74	130,136	74,926	55,210	1,067	976	64	51.74	(4,696)	50,514	125,439	1,759	0.19480	(\$915)			
6	April	74	121,747	74,926	46,821	806	743	64	58.08	(3,691)	43,131	118,057	1,645	0.19480	(\$719)			
7	May	74	90,361	74,926	15,435	312	390	(78)	49.41	3,836	19,271	94,197	1,221	0.19480	\$747			
8	June	74	89,732	74,926	14,806	182	163	19	81.25	(1,559)	13,247	88,173	1,213	0.19480	(\$304)			
9	July	72	74,166	72,901	1,265	33	27	5	38.81	(209)	1,056	73,957	1,030	0.19480	(\$41)			
10	August	71	70,623	71,888	-	10	13	(4)	0.00	0	0	70,623	995	0.19480	\$0			
11	September	70	73,343	70,876	2,467	45	80	(34)	54.69	1,866	4,363	75,229	1,048	0.19480	\$367			
12	October	69	70,815	69,863	952	263	306	(43)	3.62	155	1,107	70,970	1,026	0.19480	\$30			
13	Total	72	1,216,811	868,735	349,342	6,431	6,593	(162)		238	349,581	1,217,051	16,914		\$ 47			
14	Winter	71	747,772	433,355	314,417	5,586	5,614	(28)		-3,870	310,547	743,902	10,382		\$ (754)			
15	Summer	72	469,040	435,380	34,925	845	979	(134)		4,109	39,034	473,149	6,533		\$ 800			

Average Base Used Jul & Aug

1,012.51

**Fitchburg Gas and Electric Light Company
Sales and Demand Model
Normalization Calculations**

RR-DTE-14 (Gas)
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Class Number = 10

G-53 GS Large Low Wtr Sales

Line No.	Month	Billing Cycle Customers	Billing Cycle Sales	Base Load per customer 5,248.27	Heating Load	Monthly Degree Days		Colder Than Normal	Actual Unit Heat Load Therms/DD	Weather Adjustment	Normal Heat Load	Normal Billing Cycle Therms	Average Use Per Customer	Weather Block Rate	Base Rate Revenue	Weather Adjustment	
						Actual Degree Days	Normal Degree Days										
1	November	2	3,726	10,497	-	686	775	(89)	0.00	0	0	3,726	1,863	\$ 0.06800	\$0	\$0	
2	December	2	5,890	10,497	-	787	981	(194)	0.00	0	0	5,890	2,945	\$ 0.06800	\$0	\$0	
3	January	4	139,562	20,993	118,569	1,262	1,256	6	93.95	(542)	118,026	139,020	34,891	\$ 0.06800	\$ (548)	\$ (548)	
4	February	4	134,620	20,993	113,627	1,056	1,055	1	107.60	(95)	113,571	134,565	33,656	\$ 0.06800	\$ (95)	\$ (95)	
5	March	4	139,946	20,993	118,953	1,040	953	87	114.38	(9,897)	109,056	130,049	34,987	\$ 0.06800	\$ (871)	\$ (871)	
6	April	4	110,903	20,993	89,910	631	611	20	142.49	(2,846)	87,064	108,057	27,726	\$ 0.06800	\$ (250)	\$ (250)	
7	May	2	69,234	10,497	58,737	275	315	(40)	213.59	8,642	67,379	77,876	34,617	\$ 0.06800	\$761	\$761	
8	June	1	10,003	5,248	4,755	85	82	3	55.94	(178)	4,577	9,825	10,003	\$ 0.06800	\$ (16)	\$ (16)	
9	July	3	18,317	15,745	2,573	33	15	18	77.96	(1,404)	1,168	16,913	6,106	\$ 0.06800	\$ (124)	\$ (124)	
10	August	2	7,924	10,497	-	2	22	(20)	0.00	0	0	7,924	3,962	\$ 0.06800	\$0	\$0	
11	September	2	8,416	10,497	-	61	125	(64)	0.00	0	0	8,418	4,209	\$ 0.06800	\$0	\$0	
12	October	2	8,186	10,497	-	332	403	(71)	0.00	0	0	8,186	4,093	\$ 0.06800	\$0	\$0	
13	Total	3	666,730	167,945	507,124	6,250	6,593	(343)		(6,281)	500,843	650,450	199,056		\$ (553)	\$ (553)	
14	Winter	3	534,648	104,965	441,059	5,462	5,632	(170)		-13,341	427,719	521,307	136,066		\$ (1,174)	\$ (1,174)	
15	Summer	2	122,083	62,979	66,065	788	961	(173)		7,060	73,125	128,142	62,990		\$ 621	\$ 621	
16																	

Average Base Used Jul & Aug

5,248.27

**Fitchburg Gas and Electric Light Company
Sales and Demand Model
Normalization Calculations**

Class Number = 11

R-1 Resi Non-Heat Trans

Line No.	Month	Billing Cycle Customers	Billing Cycle Sales	Base Load per customer #DIV/0!	Heating Load	Monthly Actual Degree Days	Monthly Normal Degree Days	Colder (Warmer) Than Normal	Actual Unit Heat Load Therms/DD	Weather Adjustment	Normal Heat Load	Normal Billing Cycle Therms	Average Use Per Customer	Weather Adj Billing Block Rate	Base Rate Revenue Weath Adjustment	
1	November	0	0	0	#DIV/0!	479	550	(71)	#DIV/0!	0	#DIV/0!	0	0	0	\$ 0.22450	\$0
2	December	0	0	0	#DIV/0!	656	847	(190)	#DIV/0!	0	#DIV/0!	0	0	0	\$ 0.22450	\$0
3	January	0	1,357	0	#DIV/0!	1,357	1,222	135	#DIV/0!	0	#DIV/0!	0	0	0	\$ 0.22450	\$0
4	February	0	1,163	0	#DIV/0!	1,163	1,202	(39)	#DIV/0!	0	#DIV/0!	0	0	0	\$ 0.22450	\$0
5	March	0	1,079	0	#DIV/0!	1,079	990	89	#DIV/0!	0	#DIV/0!	0	0	0	\$ 0.22450	\$0
6	April	0	878	0	#DIV/0!	878	782	96	#DIV/0!	0	#DIV/0!	0	0	0	\$ 0.22450	\$0
7	May	0	434	0	#DIV/0!	346	434	(88)	#DIV/0!	0	#DIV/0!	0	0	0	\$ 0.22450	\$0
8	June	0	233	0	#DIV/0!	233	193	40	#DIV/0!	0	#DIV/0!	0	0	0	\$ 0.22450	\$0
9	July	0	31	0	#DIV/0!	31	36	(4)	#DIV/0!	0	#DIV/0!	0	0	0	\$ 0.22450	\$0
10	August	0	13	0	#DIV/0!	13	11	2	#DIV/0!	0	#DIV/0!	0	0	0	\$ 0.22450	\$0
11	September	0	31	0	#DIV/0!	31	66	(35)	#DIV/0!	0	#DIV/0!	0	0	0	\$ 0.22450	\$0
12	October	0	215	0	#DIV/0!	215	261	(46)	#DIV/0!	0	#DIV/0!	0	0	0	\$ 0.22450	\$0
13																
14	Total	-	6,481	0	#DIV/0!	6,481	6,593	(112)		0	#DIV/0!	0	0	0	\$	-
15	Winter	-	5,612	0	#DIV/0!	5,612	5,892	(280)		0	#DIV/0!	-	0	0	\$	-
16	Summer	-	870	0	#DIV/0!	870	1,001	(132)		0	#DIV/0!	-	0	0	\$	-

**Fitchburg Gas and Electric Light Company
Sales and Demand Model
Normalization Calculations**

Class Number = 12

R-2 Resi NH Low Inc Trans

Line No.	Month	Billing Cycle Customers	Billing Cycle Sales	Base Load per customer #DIV/0!	Heating Load #DIV/0!	Monthly Actual Degree Days	Monthly Normal Degree Days	Colder (Warmer) Than Normal	Actual Unit Heat Load Therms/DD	Weather Adjustment	Normal Heat Load	Normal Billing Cycle Therms	Average Use Per Customer	Weather Adj Billing Block Rate	Base Rate Revenue Weath Adjustment	
1	November	0	0	0	#DIV/0!	474	545	(71)	#DIV/0!	0	#DIV/0!	0	0	0	\$ 0.13470	\$0
2	December	0	0	0	#DIV/0!	661	851	(190)	#DIV/0!	0	#DIV/0!	0	0	0	\$ 0.13470	\$0
3	January	0	0	0	#DIV/0!	1,351	1,217	135	#DIV/0!	0	#DIV/0!	0	0	0	\$ 0.13470	\$0
4	February	0	0	0	#DIV/0!	1,169	1,210	(40)	#DIV/0!	0	#DIV/0!	0	0	0	\$ 0.13470	\$0
5	March	0	0	0	#DIV/0!	1,079	988	91	#DIV/0!	0	#DIV/0!	0	0	0	\$ 0.13470	\$0
6	April	0	0	0	#DIV/0!	879	783	96	#DIV/0!	0	#DIV/0!	0	0	0	\$ 0.13470	\$0
7	May	0	0	0	#DIV/0!	345	435	(90)	#DIV/0!	0	#DIV/0!	0	0	0	\$ 0.13470	\$0
8	June	0	0	0	#DIV/0!	235	194	40	#DIV/0!	0	#DIV/0!	0	0	0	\$ 0.13470	\$0
9	July	0	0	0	#DIV/0!	31	35	(4)	#DIV/0!	0	#DIV/0!	0	0	0	\$ 0.13470	\$0
10	August	0	0	0	#DIV/0!	13	11	2	#DIV/0!	0	#DIV/0!	0	0	0	\$ 0.13470	\$0
11	September	0	0	0	#DIV/0!	31	65	(34)	#DIV/0!	0	#DIV/0!	0	0	0	\$ 0.13470	\$0
12	October	0	0	0	#DIV/0!	214	260	(46)	#DIV/0!	0	#DIV/0!	0	0	0	\$ 0.13470	\$0
13	Total	-	-	0	#DIV/0!	6,482	6,593	(112)		0	#DIV/0!	0	0	0	\$	-
14	Winter	-	-	0	#DIV/0!	5,612	5,592	20		0	#DIV/0!	-	0	0	\$	-
15	Summer	-	-	0	#DIV/0!	869	1,001	(132)		0	#DIV/0!	-	0	0	\$	-

Fitchburg Gas and Electric Light Company
Sales and Demand Model
Normalization Calculations

Class Number = 13

R-3 Resi Heating Trans

Line No.	Month	Billing Cycle Customers	Billing Cycle Sales	Base Load per customer #DIV/0!	Heating Load #DIV/0!	Monthly Actual Degree Days	Monthly Normal Degree Days	Colder (Warmer) Than Normal	Actual Unit Heat Load Therms/DD	Weather Adjustment	Normal Heat Load	Normal Billing Cycle Therms	Average Use Per Customer	Weather Adj Billing Block Rate	Base Rate Revenue Weath Adjustment	
1	November	0	0	0	#DIV/0!	484	555	(71)	#DIV/0!	0	#DIV/0!	0	0	0	\$ 0.25100	\$0
2	December	0	0	0	#DIV/0!	662	852	(190)	#DIV/0!	0	#DIV/0!	0	0	0	\$ 0.25100	\$0
3	January	0	1,360	0	#DIV/0!	1,226	1,226	133	#DIV/0!	0	#DIV/0!	0	0	0	\$ 0.25100	\$0
4	February	0	1,194	0	#DIV/0!	1,159	1,194	(36)	#DIV/0!	0	#DIV/0!	0	0	0	\$ 0.25100	\$0
5	March	0	1,076	0	#DIV/0!	1,076	989	86	#DIV/0!	0	#DIV/0!	0	0	0	\$ 0.25100	\$0
6	April	0	870	0	#DIV/0!	870	776	95	#DIV/0!	0	#DIV/0!	0	0	0	\$ 0.25100	\$0
7	May	0	343	0	#DIV/0!	343	427	(84)	#DIV/0!	0	#DIV/0!	0	0	0	\$ 0.25100	\$0
8	June	0	227	0	#DIV/0!	227	189	38	#DIV/0!	0	#DIV/0!	0	0	0	\$ 0.25100	\$0
9	July	0	31	0	#DIV/0!	31	35	(4)	#DIV/0!	0	#DIV/0!	0	0	0	\$ 0.25100	\$0
10	August	0	13	0	#DIV/0!	13	12	1	#DIV/0!	0	#DIV/0!	0	0	0	\$ 0.25100	\$0
11	September	0	33	0	#DIV/0!	33	62	(35)	#DIV/0!	0	#DIV/0!	0	0	0	\$ 0.25100	\$0
12	October	0	221	0	#DIV/0!	221	269	(47)	#DIV/0!	0	#DIV/0!	0	0	0	\$ 0.25100	\$0
13	Total	-	6,479	0	#DIV/0!	6,479	6,593	(114)		0	#DIV/0!	0	0	0	\$	\$
14	Winter	-	5,611	0	#DIV/0!	5,611	5,593	18		0	#DIV/0!	-	0	0	\$	\$
15	Summer	-	869	0	#DIV/0!	869	1,000	(131)		0	#DIV/0!	-	0	0	\$	\$

**Fitchburg Gas and Electric Light Company
Sales and Demand Model
Normalization Calculations**

Class Number = 14

R-4 Resi Htg Low Inc Trans

Line No.	Month	Billing Cycle Customers	Billing Cycle Sales	Base Load per customer #DIV/0!	Hearing Load	Monthly Actual Degree Days	Monthly Normal Degree Days	Colder Than Normal (Warmer)	Actual Unit Heat Load Therms/DD	Weather Adjustment	Normal Heat Load	Normal Billing Cycle Therms	Average Use Per Customer	Weather Adj. Billing Block Rate	Base Rate Revenue Weath Adjustment	
1	November	0	0	0	#DIV/0!	479	551	(72)	#DIV/0!	0	#DIV/0!	0	0	0	\$ 0.15060	\$0
2	December	0	0	0	#DIV/0!	662	856	(193)	#DIV/0!	0	#DIV/0!	0	0	0	\$ 0.15060	\$0
3	January	0	0	0	#DIV/0!	1,361	1,230	131	#DIV/0!	0	#DIV/0!	0	0	0	\$ 0.15060	\$0
4	February	0	0	0	#DIV/0!	1,163	1,203	(40)	#DIV/0!	0	#DIV/0!	0	0	0	\$ 0.15060	\$0
5	March	0	0	0	#DIV/0!	1,077	986	90	#DIV/0!	0	#DIV/0!	0	0	0	\$ 0.15060	\$0
6	April	0	0	0	#DIV/0!	870	774	96	#DIV/0!	0	#DIV/0!	0	0	0	\$ 0.15060	\$0
7	May	0	0	0	#DIV/0!	334	424	(91)	#DIV/0!	0	#DIV/0!	0	0	0	\$ 0.15060	\$0
8	June	0	0	0	#DIV/0!	228	188	40	#DIV/0!	0	#DIV/0!	0	0	0	\$ 0.15060	\$0
9	July	0	0	0	#DIV/0!	31	33	(2)	#DIV/0!	0	#DIV/0!	0	0	0	\$ 0.15060	\$0
10	August	0	0	0	#DIV/0!	12	12	1	#DIV/0!	0	#DIV/0!	0	0	0	\$ 0.15060	\$0
11	September	0	0	0	#DIV/0!	34	68	(34)	#DIV/0!	0	#DIV/0!	0	0	0	\$ 0.15060	\$0
12	October	0	0	0	#DIV/0!	222	270	(48)	#DIV/0!	0	#DIV/0!	0	0	0	\$ 0.15060	\$0
13	Total	-	-	0	#DIV/0!	6,473	6,593	(121)	#DIV/0!	0	#DIV/0!	0	0	0	\$	\$
14	Winter	-	-	0	#DIV/0!	5,611	5,598	13	#DIV/0!	0	#DIV/0!	-	0	0	\$	\$
15	Summer	-	-	0	#DIV/0!	861	995	(134)	#DIV/0!	0	#DIV/0!	-	0	0	\$	\$

**Fitchburg Gas and Electric Light Company
Sales and Demand Model
Normalization Calculations**

Class Number = 15

G-41 GS Small Hi Wtr Trans

Line No.	Month	Billing Cycle Customers	Billing Cycle Sales	Base Load per customer 425.51	Heating Load	Monthly Degree Days		Colder (Warmer) Than Normal	Actual Unit Heat Load Therms/DD	Weather Adjustment	Normal Heat Load	Normal Billing Cycle Therms	Average Use Per Customer	Weather Adj. Billing Block Rate	Base Rate Revenue	Weather Adjustment
						Actual Degree Days	Normal Degree Days									
1	November	2	1,043	851	192	515	590	(75)	0.37	28	220	1,071	522	\$ 0.21360	\$6	\$6
2	December	1	245	426	-	690	880	(189)	0.00	0	0	245	245	\$ 0.21360	\$0	\$0
3	January	0	0	0	-	1,372	1,256	116	0.00	0	0	245	0	\$ 0.21360	\$0	\$0
4	February	1	1,514	426	1,088	1,138	1,166	(28)	0.96	27	1,115	1,540	1,514	\$ 0.21360	\$6	\$6
5	March	1	1,395	426	969	1,067	974	93	0.91	(85)	885	1,310	1,395	\$ 0.21360	(\$18)	(\$18)
6	April	1	1,174	426	749	824	741	83	0.91	(76)	673	1,098	1,174	\$ 0.21360	\$24	(\$16)
7	May	1	874	426	448	314	392	(78)	1.43	112	560	986	874	\$ 0.21360	\$24	\$24
8	June	1	677	426	251	196	164	32	1.28	(41)	210	635	677	\$ 0.21360	(\$9)	(\$9)
9	July	1	456	426	31	31	2	2	0.98	(2)	28	454	456	\$ 0.21360	(\$1)	(\$1)
10	August	1	567	426	-	10	14	(4)	0.00	0	0	395	395	\$ 0.21360	\$0	\$0
11	September	1	524	426	142	43	91	(37)	3.29	123	265	690	567	\$ 0.21360	\$26	\$26
12	October	1	524	426	98	258	307	(49)	0.38	19	117	542	524	\$ 0.21360	\$4	\$4
13	Total	1	8,864	5,106	3,969	6,460	6,593	(134)		104	4,073	8,968	8,342		\$	\$
14	Winter	1	5,371	2,553	2,999	5,607	5,607	(0)		-106	2,893	5,265	4,849		\$	(\$23)
15	Summer	1	3,493	2,553	970	853	986	(133)		210	1,180	3,702	3,493		\$	\$45

Average Base Used Jul & Aug

425.51

Fitchburg Gas and Electric Light Company
Sales and Demand Model
Normalization Calculations

Class Number = 16

G-42 GS Med Hi Wtr Trans

Line No.	Month	Billing Cycle Customers	Billing Cycle Sales	Base Load per customer	485.98	Heating Load	Monthly Actual Degree Days	Monthly Normal Degree Days	Colder (Warmer) Than Normal	Actual Unit Heat Load Therms/DD	Weather Adjustment	Normal Heat Load	Normal Billing Cycle Therms	Average Use Per Customer	Weather Adj Billing Block Rate	Base Rate Revenue	Weather Adjustment
1	November	21	41,719	10,205	31,514	520	611	611	(91)	60.55	5,486	37,000	47,205	1,987	0.20250	\$1,111	
2	December	22	65,503	10,691	54,811	675	892	892	(217)	81.26	17,631	72,443	83,134	2,977	0.20250	\$3,570	
3	January	0	0	0	0	1,368	1,253	1,253	115	0.00	0	0	0	0	0.20250	\$0	
4	February	8	12,470	3,888	8,583	1,136	1,150	1,150	(14)	7.56	108	8,690	12,578	1,559	0.20250	\$22	
5	March	8	16,309	3,888	12,422	1,072	973	973	99	11.58	(1,146)	11,275	15,163	2,039	0.20250	(\$232)	
6	April	8	12,379	3,888	8,491	827	731	731	97	10.26	(994)	7,497	11,385	1,547	0.20250	(\$201)	
7	May	11	7,477	5,346	2,131	303	385	385	(82)	7.03	575	2,706	8,051	680	0.20250	\$116	
8	June	9	5,770	4,374	1,396	200	155	155	45	42.64	(316)	1,080	5,454	641	0.20250	(\$64)	
9	July	11	6,692	5,346	1,346	32	28	28	4	0.00	0	1,187	6,532	608	0.20250	(\$32)	
10	August	11	4,000	5,346	-	10	15	15	(5)	0.00	0	1,808	4,000	364	0.20250	\$0	
11	September	14	7,740	6,904	936	44	44	44	(41)	21.18	872	1,808	8,612	553	0.20250	\$177	
12	October	16	16,679	7,776	8,903	252	316	316	(64)	35.30	2,267	11,170	18,946	1,042	0.20250	\$499	
13	Total	12	196,737	67,551	130,533	6,440	6,593	6,593	(154)		24,322	154,855	221,060	13,997		\$ 4,925	
14	Winter	11	148,360	32,560	115,820	5,598	5,609	5,609	(11)		21,065	136,905	169,465	10,109		\$ 4,270	
15	Summer	12	48,357	34,990	14,713	841	984	984	(143)		3,237	17,950	51,594	3,888		\$ 656	
16	Average Base Used Jul & Aug					485.98											

**Fitchburg Gas and Electric Light Company
Sales and Demand Model
Normalization Calculations**

Class Number = 17

G-43 GS Large Hi Wtr Trans

Line No.	Month	Billing Cycle Customers	Billing Cycle Sales	Base Load per customer	Heating Load	Monthly Actual Degree Days	Monthly Normal Degree Days	Colder Than Normal	Warmer Than Normal	Actual Unit Heat Load Therms/DD	Weather Adjustment	Normal Heat Load	Normal Billing Cycle Therms	Average Use Per Customer	Weather Adj Billing Block Rate	Base Rate Revenue	Weather Adjustment
1	November	5	62,622	12,363	50,259	515	775	(260)	(293)	97.65	25,402	75,661	88,024	12,524	\$ 0.09790	\$2,487	
2	December	6	110,178	14,836	95,343	687	981	(293)	(293)	138.71	40,691	136,034	150,870	18,363	\$ 0.09790	\$3,964	
3	January	4	184,350	9,890	174,459	1,363	1,256	107	107	127.96	(13,714)	160,745	170,655	46,087	\$ 0.09790	(\$1,343)	
4	February	5	136,682	12,363	124,319	1,144	1,055	89	89	108.66	(9,630)	114,689	127,052	27,336	\$ 0.09790	(\$943)	
5	March	6	121,454	14,836	106,619	1,068	963	114	114	99.84	(11,424)	95,195	110,030	20,242	\$ 0.09790	(\$1,118)	
6	April	6	73,003	14,836	58,167	822	611	211	211	70.75	(14,939)	43,228	58,063	12,167	\$ 0.09790	(\$1,463)	
7	May	3	27,540	7,418	20,123	312	315	(4)	(4)	64.60	255	20,378	27,796	9,180	\$ 0.09790	\$25	
8	June	14	22,028	34,617	-	200	82	119	119	0.00	0	0	22,028	1,573	\$ 0.09790	\$0	
9	July	6	14,063	14,836	-	31	16	16	16	0.00	0	0	14,063	2,347	\$ 0.09790	\$0	
10	August	6	16,589	14,836	753	10	22	(12)	(12)	75.59	885	1,638	16,474	2,598	\$ 0.09790	\$87	
11	September	6	16,585	14,836	1,745	41	125	(83)	(83)	42.19	3,521	5,270	20,106	2,764	\$ 0.09790	\$346	
12	October	6	45,954	14,836	31,118	254	403	(148)	(148)	122.41	18,155	49,274	64,109	7,659	\$ 0.09790	\$1,777	
13	Total	6	830,067	180,501	662,908	6,448	6,593	(145)	(145)	39,203	702,110	702,110	869,270	162,843	\$	\$ 3,838	
14	Winter	5	688,289	79,124	609,165	5,600	5,632	(32)	(32)	16,386	625,551	625,551	704,674	136,721	\$	\$ 1,604	
15	Summer	7	141,779	101,377	53,743	849	961	(113)	(113)	22,817	76,559	76,559	164,595	26,122	\$	\$ 2,234	

Average Base Used Jul & Aug

2,472.61

Fitchburg Gas and Electric Light Company
Sales and Demand Model
Normalization Calculations

Class Number = 18

G-51 GS Small Low Wtr Trans

Line No.	Month	Billing Cycle Customers	Billing Cycle Sales	Base Load per customer #DIV/0!	Heating Load	Monthly Degree Days		Colder (Warmer) Than Normal	Actual Unit Heat Load Therms/DD	Weather Adjustment	Normal Heat Load	Normal Billing Cycle Therms	Average Use Per Customer	Weath Adj Billing Block Rate	Base Rate Revenue Weath Adjustment
						Actual Degree Days	Normal Degree Days								
1	November	0	0	0	#DIV/0!	686	589	97	#DIV/0!	0	#DIV/0!	0	0	0	\$0
2	December	0	0	0	#DIV/0!	787	881	(94)	#DIV/0!	0	#DIV/0!	0	0	0	\$0
3	January	0	0	0	#DIV/0!	1,262	1,252	10	#DIV/0!	0	#DIV/0!	0	0	0	\$0
4	February	0	0	0	#DIV/0!	1,056	1,175	(119)	#DIV/0!	0	#DIV/0!	0	0	0	\$0
5	March	0	0	0	#DIV/0!	1,040	972	68	#DIV/0!	0	#DIV/0!	0	0	0	\$0
6	April	0	0	0	#DIV/0!	631	740	(109)	#DIV/0!	0	#DIV/0!	0	0	0	\$0
7	May	0	0	0	#DIV/0!	275	395	(120)	#DIV/0!	0	#DIV/0!	0	0	0	\$0
8	June	0	0	0	#DIV/0!	85	165	(80)	#DIV/0!	0	#DIV/0!	0	0	0	\$0
9	July	0	0	0	#DIV/0!	33	28	5	#DIV/0!	0	#DIV/0!	0	0	0	\$0
10	August	0	0	0	#DIV/0!	2	14	(12)	#DIV/0!	0	#DIV/0!	0	0	0	\$0
11	September	0	0	0	#DIV/0!	61	79	(18)	#DIV/0!	0	#DIV/0!	0	0	0	\$0
12	October	0	0	0	#DIV/0!	332	303	29	#DIV/0!	0	#DIV/0!	0	0	0	\$0
13	Total	-	-	0	#DIV/0!	6,250	6,593	(343)	#DIV/0!	0	#DIV/0!	0	0	0	\$
14	Winter	-	-	0	#DIV/0!	5,462	5,609	(147)	#DIV/0!	0	#DIV/0!	0	0	0	\$
15	Summer	-	-	0	#DIV/0!	788	984	(196)	#DIV/0!	0	#DIV/0!	0	0	0	\$

Fitchburg Gas and Electric Light Company
Sales and Demand Model
Normalization Calculations

Class Number = 19

G-52 GS Med Low Wtr Trans

Line No.	Month	Billing Cycle Customers	Billing Cycle Sales	Base Load per customer	469.43	Heating Load	Monthly Actual Degree Days	Monthly Normal Degree Days	Colder Than Normal	Warmer Than Normal	Actual Unit Heat Load Therms/DD	Weather Adjustment	Normal Heat Load	Normal Billing Cycle Therms	Average Use Per Customer	Weather Adj. Billing Block Rate	Base Rate Revenue	Weather Adjustment	
1	November	7	8,473	3,286	5,187	537	591	537	(175)	(64)	9.66	520	5,707	8,983	1,210	0.19480	\$101		
2	December	9	11,548	4,225	7,323	700	875	700	(175)	(64)	10.46	1,827	9,151	13,376	1,263	0.19480	\$356		
3	January	0	0	0	-	1,352	1,259	1,352	93	93	0.00	0	0	0	0	0.19480	\$0		
4	February	3	4,263	1,408	2,855	1,124	1,170	1,124	(46)	(91)	2.54	118	2,972	4,381	1,421	0.19480	\$23		
5	March	3	4,141	1,408	2,732	1,067	976	1,067	91	91	2.56	(232)	2,500	3,908	1,380	0.19480	(\$45)		
6	April	3	3,290	1,408	1,881	806	743	806	64	64	2.33	(148)	1,733	3,141	1,097	0.19480	(\$29)		
7	May	3	2,392	1,408	984	312	390	312	(78)	(78)	3.15	245	1,229	2,637	797	0.19480	\$48		
8	June	3	3,070	1,408	1,661	182	163	182	19	19	9.12	(175)	1,486	2,895	1,023	0.19480	(\$94)		
9	July	4	645	1,878	-	33	27	33	5	5	0.00	0	0	645	161	0.19480	\$0		
10	August	5	3,580	2,347	1,233	10	13	10	(4)	(4)	128.87	481	1,714	4,061	716	0.19480	\$94		
11	September	6	4,311	2,817	1,494	45	80	45	(34)	(34)	33.13	1,143	2,637	5,454	718	0.19480	\$223		
12	October	7	6,133	3,286	2,847	263	306	263	(43)	(43)	10.82	464	3,311	6,597	876	0.19480	\$90		
13	Total	4	51,844	24,880	28,197	6,431	6,593	6,431	(162)	(162)	4.242	4,242	32,440	56,087	10,684		\$	826	
14	Winter	4	31,714	11,736	19,978	5,586	5,614	5,586	(28)	(28)	2,085	2,085	22,063	33,799	6,391		\$	406	
15	Summer	5	20,130	13,144	8,219	845	979	845	(134)	(134)	2,158	2,158	10,377	22,288	4,292		\$	420	

Average Base Used Jul & Aug

469.43

Fitchburg Gas and Electric Light Company
Sales and Demand Model
Normalization Calculations

Class Number = 23

G-53 GS Large Low Wtr Trans

Line No.	Month	Billing Cycle Customers	Billing Cycle Sales	Base Load per customer	18,582.88	Heating Load	Monthly Actual Degree Days	Monthly Normal Degree Days	Colder (Warmer) Than Normal	Actual Unit Heat Load Therms/DD	Weather Adjustment	Normal Heat Load	Normal Billing Cycle Therms	Average Use Per Customer	Weather Adj Billing Block Rate	Base Rate Revenue	Weather Adjustment
1	November	8	185,921	148,663	47,258	686	775	(89)	68.89	6,118	53,376	202,039	24,490	0.08800	\$538		
2	December	7	166,769	130,080	36,689	787	981	(194)	46.62	9,031	45,720	175,800	23,824	0.08800	\$795		
3	January	7	226,770	130,080	96,690	1,262	1,256	6	76.62	(442)	96,248	226,328	32,396	0.08800	(\$39)		
4	February	7	179,707	130,080	49,627	1,056	1,055	1	47.00	(24)	49,603	179,683	25,672	0.08800	(\$2)		
5	March	7	192,883	130,080	62,803	1,040	953	87	60.39	(5,225)	57,578	187,668	27,555	0.08800	(\$460)		
6	April	7	139,345	130,080	9,265	631	611	20	14.68	(293)	8,972	139,062	19,906	0.08800	(\$26)		
7	May	9	113,042	167,246	-	275	315	(40)	0.00	0	0	113,042	12,960	0.08800	\$0		
8	June	8	154,236	148,663	5,573	85	82	3	66.57	(209)	5,364	145,027	18,195	0.08800	(\$18)		
9	July	8	145,563	148,663	-	33	15	18	0.00	0	0	145,563	18,370	0.08800	\$0		
10	August	8	151,763	148,663	-	2	22	(20)	0.00	0	0	151,763	15,107	0.08800	\$0		
11	September	8	120,950	148,663	-	61	125	(64)	0.00	0	0	120,856	15,107	0.08800	\$0		
12	October	8	194,174	148,663	45,511	332	403	(71)	137.08	9,670	55,181	203,844	24,272	0.08800	\$851		
13	Total	8	1,981,030	1,709,625	353,416	6,250	6,593	(343)		18,624	372,041	1,999,655	262,228		\$ 1,639		
14	Winter	7	1,101,396	799,064	302,332	5,462	5,632	(170)		9,163	311,495	1,110,559	153,844		\$ 806		
15	Summer	8	879,634	910,561	51,084	788	961	(173)		9,461	60,545	889,095	108,384		\$ 833		

Average Base Used Jul & Aug 18,582.88

Fitchburg Gas and Electric Light Company
Sales and Demand Model
Summary of Billing Month Normalized Sales

RR-DTE-14 (Gas)
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BILLING MONTH	November 2001	December 2001	January 2001	February 2001	March 2001	April 2001	May 2001	June 2001	July 2001	August 2001	September 2001	October 2001	TOTAL	WINTER	SUMMER
1 R-1 Resi Non-Heat Sales	58,269	66,629	84,299	75,326	85,780	51,534	62,386	51,051	41,597	27,769	50,535	38,008	692,692	421,637	270,655
2 R-2 Resi NH Low Inc Sales	3,704	5,306	5,554	5,365	3,135	5,156	5,987	3,818	3,663	2,299	2,749	2,955	51,121	30,269	20,851
3 R-3 Resi Heating Sales	710,910	1,067,895	1,752,355	1,717,957	1,410,066	1,024,041	599,171	301,100	205,080	181,242	208,668	326,031	9,518,386	7,706,906	1,811,480
4 R-4 Resi Hg Low Inc Sales	79,844	119,534	136,140	142,537	123,006	116,097	64,697	42,922	29,102	25,371	46,951	29,697	966,286	717,348	248,939
5 G-1 GS Small HI Wtr Sales	141,842	208,953	279,670	416,636	333,447	228,237	78,302	29,938	17,731	21,508	10,772	43,322	2,014,506	1,801,935	212,571
6 G-2 GS Med HI Wtr Sales	202,956	398,074	679,676	601,475	468,491	288,588	202,588	69,846	45,829	32,202	55,251	118,593	3,253,582	2,728,873	524,709
7 G-3 GS Large HI Wtr Sales	128,728	174,862	260,534	166,818	155,525	70,430	35,397	14,717	11,724	10,228	16,638	74,236	1,148,063	865,928	163,137
8 G-4 GS Small Low Wtr Sales	44,882	57,865	82,354	70,871	62,329	58,866	46,757	47,548	34,777	33,706	35,664	80,771	371,658	371,658	235,913
9 G-5 GS Med Low Wtr Sales	92,882	93,028	167,740	146,658	125,439	118,057	94,197	88,173	73,957	70,823	75,229	70,570	1,217,051	743,902	473,149
10 G-6 GS Large Low Wtr Sales	3,726	5,860	139,020	134,565	130,049	108,057	77,876	9,825	16,913	7,924	8,418	8,186	850,450	521,307	128,142
11 R-1 Resi Non-Heat Trans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12 R-2 Resi NH Low Inc Trans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13 R-3 Resi Heating Trans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14 R-4 Resi Hg Low Inc Trans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15 G-1 GS Small HI Wtr Trans	1,071	245	0	1,540	1,310	1,098	986	635	454	395	690	542	8,968	5,285	3,702
16 G-2 GS Med HI Wtr Trans	47,205	83,134	0	12,578	11,163	11,395	8,051	5,454	6,532	4,000	8,612	18,946	221,060	169,465	51,594
17 G-3 GS Large HI Wtr Trans	88,024	150,870	170,635	127,052	110,030	58,063	27,796	22,028	14,083	16,474	20,108	64,109	866,270	704,674	164,595
18 G-4 GS Small Low Wtr Trans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19 G-5 GS Med Low Wtr Trans	8,993	13,376	0	4,381	3,506	3,141	2,637	2,895	645	4,061	5,454	6,597	58,087	33,799	22,288
20 G-6 GS Large Low Wtr Trans	202,039	175,800	226,328	179,683	187,659	139,052	113,042	154,027	145,653	151,763	120,656	203,844	1,999,655	1,110,559	889,095
21 Total	1,874,587	2,635,622	4,206,324	3,803,204	3,241,557	2,292,831	1,430,148	843,987	647,649	589,162	666,980	1,044,085	23,275,966	18,053,925	5,222,031
22 Total Sales	1,527,255	2,212,188	3,809,361	3,477,969	2,923,287	2,080,091	1,277,837	858,948	480,373	412,470	511,272	750,057	20,120,918	16,030,161	4,090,758
23 Total Transportation	347,332	423,424	396,963	325,235	318,070	212,740	152,311	185,039	167,277	176,692	155,718	294,038	3,155,038	2,023,763	1,131,275

**Fitchburg Gas and Elec Fitchburg Gas and Electric Light Company
Sales and Demand Mod Sales and Demand Model
Summary of Billing Mod Summary of Billing Month Normalized Sales Corrections**

BILLING MONTH	November 2001	December 2001	January 2001	February 2001	March 2001	April 2001	May 2001	June 2001	July 2001	August 2001	September 2001	October 2001	TOTAL	WINTER	SUMMER
SALES, Therms															
1 R-1 Resi Non-Heat Sales	-	-	-	-	-	-	-	-	-	-	-	-	0	0	0
2 R-2 Resi NH Low Inc Sales	-	-	-	-	-	-	-	-	-	-	-	-	0	0	0
3 R-3 Resi Heating Sales	-	-	-	-	-	-	-	-	-	-	-	-	0	0	0
4 R-4 Resi Htg Low Inc Sales	586	1,173	(306)	111	(279)	(435)	1,153	(823)	120	-	4,381	692	6,364	861	5,503
5 G-41 GS Small HI Wtr Sales	90	203	(49)	7	(51)	(63)	150	(123)	(63)	-	490	134	726	137	588
6 G-42 GS Med HI Wtr Sales	226	255	(64)	(52)	(64)	(153)	5	(353)	(11)	-	1,351	348	1,487	147	1,340
7 G-43 GS Large HI Wtr Sales	-	-	-	-	-	-	-	-	-	-	-	-	0	0	0
8 G-51 GS Small Low Wtr Sales	-	-	-	-	-	-	-	-	-	-	-	-	0	0	0
9 G-52 GS Med Low Wtr Sales	-	-	-	-	-	-	-	-	-	-	-	-	0	0	0
10 G-53 GS Large Low Wtr Sales	-	-	-	-	-	-	-	-	-	-	-	-	0	0	0
11 B-2 Resi Non-Heat Trans	-	-	-	-	-	-	-	-	-	-	-	-	0	0	0
12 B-3 Resi Heating Trans	-	-	-	-	-	-	-	-	-	-	-	-	0	0	0
13 R-2 Resi Heating Trans	-	-	-	-	-	-	-	-	-	-	-	-	0	0	0
14 R-4 Resi Htg Low Inc Trans	16	-	-	1	(5)	(6)	14	-	(2)	-	48	11	68	7	61
15 G-41 GS Small HI Wtr Trans	527	534	(66)	(81)	(134)	(321)	8	-	-	865	2,518	730	4,800	458	4,141
16 G-42 GS Med HI Wtr Trans	-	-	-	-	-	-	-	-	-	-	-	-	0	0	0
17 G-43 GS Large HI Wtr Trans	-	-	-	-	-	-	-	-	-	-	-	-	0	0	0
18 G-51 GS Small Low Wtr Tran	254	812	-	45	(92)	(96)	245	(114)	-	491	1,143	413	3,100	933	2,167
19 G-52 GS Med Low Wtr Tran	1,710	2,977	(484)	31	(625)	(1,064)	1,574	(1,422)	43	1,366	9,911	2,328	16,345	2,545	13,800
20 G-53 GS Large Low Wtr Trai	913	1,630	(419)	66	(394)	(652)	1,308	(1,298)	45	-	6,202	1,175	8,576	1,145	7,431
21 Total	797	1,346	(66)	(35)	(231)	(412)	266	(123)	(2)	1,366	3,709	1,153	7,769	1,400	6,369
22 Total Sales															
23 Total Transportation															

Fitchburg Gas and Elec Fitchburg Gas and Electric Light Company
 Sales and Demand ModSales and Demand Model
Revenue Adjustments Summary of Billing Month Normalized Sales Corrections

ADJUSTMENT, \$S	November 2001	December 2001	January 2001	February 2001	March 2001	April 2001	May 2001	June 2001	July 2001	August 2001	September 2001	October 2001	TOTAL	WINTER	SUMMER
1 R-1 Resi Non-Heat Sales	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2 R-2 Resi NH Low Inc Sales	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
3 R-3 Resi Heating Sales	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
4 R-4 Resi Htg Low Inc Sales	0.7%	1.0%	-0.2%	0.0%	-0.2%	-0.4%	1.5%	-1.9%	0.4%	0.0%	9.3%	2.3%	0.7%	0.1%	2.2%
5 G-41 GS Small Hi Wtr Sales	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
6 G-42 GS Med Hi Wtr Sales	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.1%	-0.2%	-0.1%	0.0%	0.0%	0.1%	0.0%	0.0%	0.1%
7 G-43 GS Large Hi Wtr Sales	0.2%	0.1%	0.0%	0.0%	0.0%	-0.7%	0.0%	-2.4%	-0.1%	0.0%	8.0%	0.5%	0.1%	0.0%	0.5%
8 G-51 GS Small Low Wtr Sale	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
9 G-52 GS Med Low Wtr Sale	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
10 G-53 GS Large Low Wtr Sale	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
11 R-1 Resi Non-Heat Trans															
12 R-2 Resi NH Low Inc Trans															
13 R-3 Resi Heating Trans															
14 R-4 Resi Htg Low Inc Trans	1.5%	0.0%	0.0%	0.1%	-0.4%	-0.5%	1.4%	-1.4%	-0.5%	0.0%	7.0%	1.9%	0.8%	0.1%	1.5%
15 G-41 GS Small Hi Wtr Trans	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
16 G-42 GS Med Hi Wtr Trans	0.0%	0.4%	0.0%	-0.1%	-0.1%	-0.6%	0.0%	0.0%	0.0%	5.4%	12.5%	1.1%	0.5%	0.1%	2.5%
17 G-43 GS Large Hi Wtr Trans															
18 G-51 GS Small Low Wtr Tran	2.8%	6.1%	0.0%	1.0%	-2.4%	-2.7%	5.3%	-3.9%	0.0%	11.8%	21.0%	6.3%	5.5%	2.8%	9.7%
19 G-52 GS Med Low Wtr Tran	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
20 G-53 GS Large Low Wtr Tran	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.1%	-0.2%	0.0%	0.2%	1.5%	0.2%	0.07%	0.0%	0.3%
21 Total	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.1%	-0.2%	0.0%	0.0%	1.2%	0.2%	0.0%	0.0%	0.2%
22 Total Sales	0.2%	0.3%	0.0%	0.0%	-0.1%	-0.2%	0.2%	-0.1%	0.0%	0.8%	2.4%	0.4%	0.2%	0.1%	0.8%
23 Total Transportation															